IV: Late-Medieval Agriculture: Changes in later-medieval European agrarian societies

Lecture 7:3 – D. Agrarian Changes in Late-medieval England: before and after the Black Death, 1290 – 1520

Revised: 30 October 2013

Agriculture in the English Economy before the Black Death

- (1) **If one were to view the English economy before the Black Death,** no one would guess that England would ultimately be the **homeland of the modern Industrial Revolution**
- (2) **Its economy was then overwhelmingly agrarian: only about 5% - 10% urbanized:** an economy far less urbanized, industrialized, and commercially advanced than many other European regions (especially Italy and Low Countries)
- (3) **Its agriculture was far less advanced,** productive than that of the Low Countries, or other parts of western Europe

SHEEP & WOOL in the English Medieval Economy 1

- (4) **SHEEP & WOOL**: however, provided English agriculture and the economy with **enormous advantages:**
- a) **Late-medieval England had Europe's finest, highest quality wools** (though with many grades, varieties):
- i.e., before the later 16th - 17th century victory of the **Spanish merino wools**
- b) **also the largest flocks of sheep in medieval Europe**: with about 8 – 10 million sheep vs. 4.5 to 5.0 million people in 1300

SHEEP & WOOL in the English Medieval Economy 2

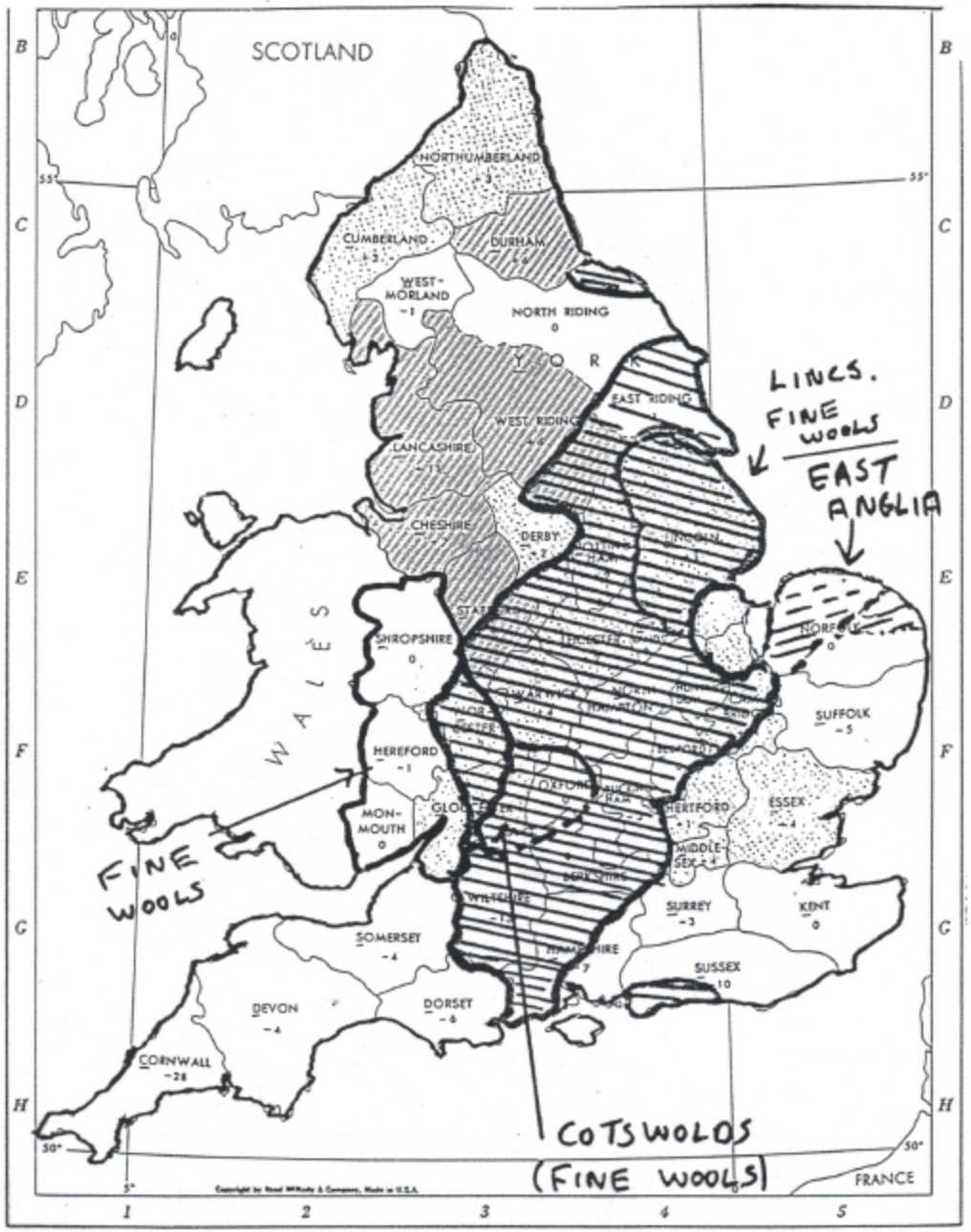
- c) **wool then accounted for at least 90% of the value of English exports**
- **- until mid 15th century**, when woollen broadcloths finally overtook raw wool as the primary export
- - **1640s:** woollens still produced 92.5% of total export value

SHEEP & WOOL in the English Medieval Economy 3

- d) **Sheep were a vital, integral part (with cattle) of England's Mixed Husbandry** in the Midlands Open Field farming systems: for reasons already noted
- e) **Sheep, wool and then cloth export trades**: **determined the fortunes of English agriculture, trade, and industry** throughout this era: single most component of the late-medieval English economy

SHEEP & WOOL in the English Medieval Economy 4

- f) **Tudor Enclosures:** final topic in this lecture:
- **to be seen as a consequence of** demographic decline, manorial decline, and expansion of English cloth export trades: from 1460s to 1520s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CHESHIRE
DERBY
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FINE WOOLS
EAST ANGLIA
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NORFOLK
SUFFOLK
HEREFORD
MON-MOUTH
HERTFORD
ESSEX
MIDDLE-SEX
FINE WOOLS
WILTSHIRE
SURREY
KENT
SOMERSET
SUSSEX
DEVON
DORSET
CORNWALL
COTSWOLDS
(FINE WOOLS)
FRANCE

Demographic Growth, 'Crisis', and agrarian changes, c. 1290- 1315

- (1) **The Boserup Model**: *Population Growth and Technological Change* (1981): cited in last day's online lecture (Flanders)
- Argued that historically, over much of the world, **population growth and Law of Diminishing Returns** have together provided the key incentives to technological changes in agriculture

(2) **Last day's lecture on agrarian changes in late-medieval Flanders:** (online only): provided examples of the Boserup model: to increase productivity, per unit of land and unit of labour

Demographic Growth, 'Crisis', and agrarian changes, c. 1290- 1315 (2)

- (2) **Boserup model also found in England's East Anglia: from ca. 1290 – ca. 1315** (era of Great Famine (1315-22):
- (3) **Era of demographic growth, with increased population densities in East Anglia:** (& the Midlands) to the Great Famine
- (4) **question: did that population growth provide a spur to technological changes?**


SCOTLAND
NORTHUMBERLAND +3
CUMBERLAND +3
DURHAM +6
WEST-MORLAND -1
NORTH RIDING 0
YORK
EAST RIDING -1
WEST RIDING +6
LANCASHIRE +11
CHESHIRE +7
DERBY +2
NOTTING-HAM +2
LINCOLN +1
STAFFORD +8
SHROPSHIRE 0
LEICESTER +2
RUT-LAND 0
NORFOLK
WARWICK +4
NORTH-HAMPTON -1
HUNTING-DON 0
CAM-BRIDGE +1
SUFFOLK -5
WOR-CESTER +2
HEREFORD -1
BEDFORD 0
OXFORD 0
BUCKING-HAM -3
HERTFORD +1
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MON-MOUTH 0
GLOUCESTER +5
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FARMING REGIONS
circa 1600
50 Kms
Derby
Gloucester
Salisbury
MIXED FARMING
A Grain and stock
B Sheep and grain
C Stock fattening
PASTURE FARMING
Wood pasture
Stock fattening, pig keeping
Open pasture
Cattle and sheep
Rearing and fattening
Dairying
Marsh and alluvium

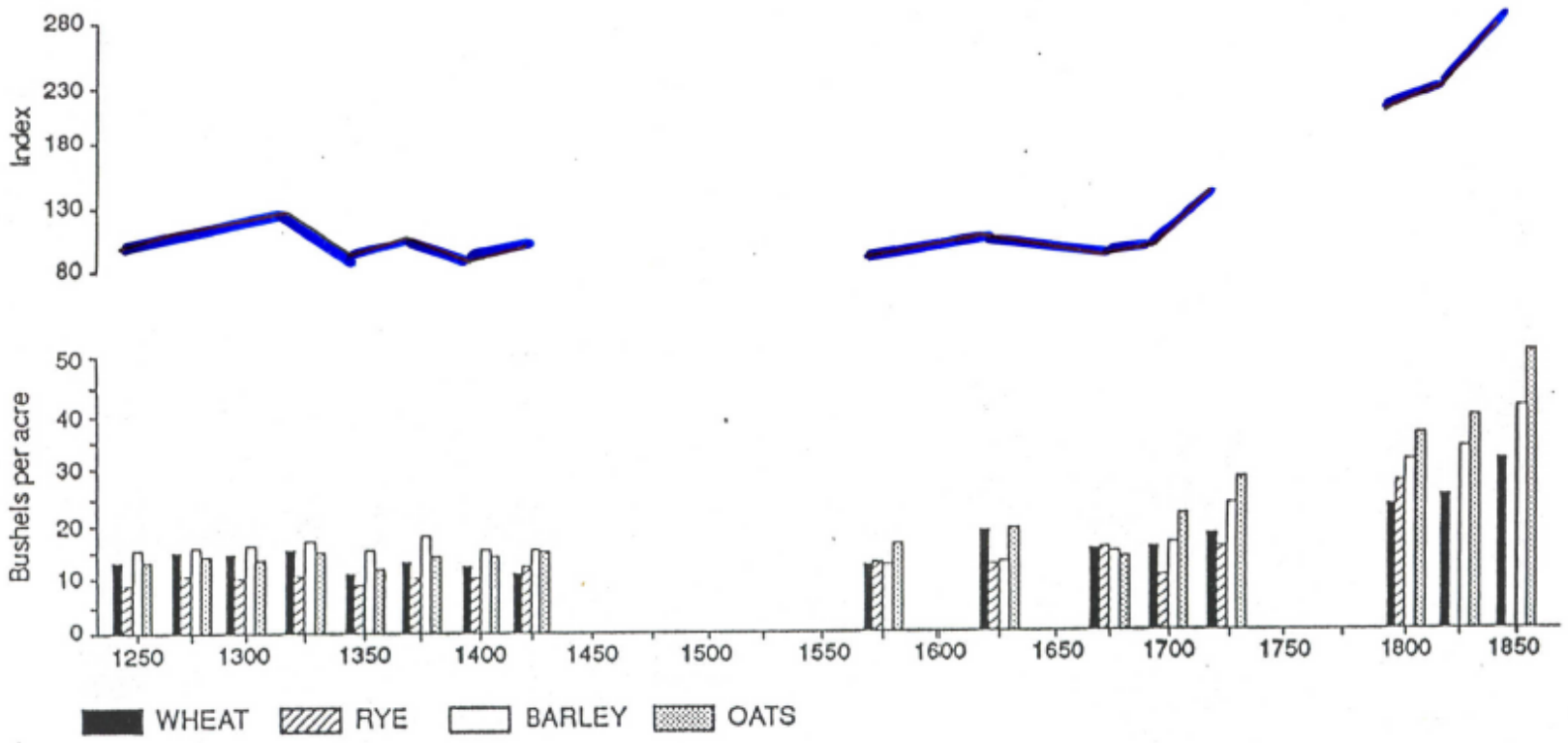
Agrarian changes in East Anglia: Norfolk & Suffolk, ca. 1300 (1)

- (1) **similar changes as in Flanders: to reduce the fallow-**
- - **shift from grains** to other crops
- - **especially fodder crops**: and stall feeding
- - **heavy manuring** of fields
- - **row cultivation**, with greater crop densities
- - **intensive cultivation** of more fields **with cheap labour**
- - **but NO Convertible Husbandry**, as in Flanders (topic for later consideration)
- (2) **Also Battle Abbey** (in **Sussex**, on south coast): similar intensive husbandry on some manors:
- those few that were entirely in demesne (domain)

Agrarian changes in East Anglia: Norfolk & Suffolk, ca. 1300 (2)

- (3) **Why was East Anglia then the locus of technical changes?**
- -a) **weak manorialism and absence of Common Fields**, or of fully developed Common Fields (wide variety in East Anglia)
- -b) **individual peasant farming far more prominent**
- -c) **partible inheritance, rapid population growth** → subdivided holdings: → cheap labour for intensive husbandry (& textile industries)
- - d) **transport and trade**: from coastal and overseas shipping, and development of markets and trading networks: to supply grain

Norfolk Cereal Yields



Norfolk: Gross Crop Yields, in Bushels per Acre

1250 - 1740: 1250-74 = 100

Years	Wheat	Rye	Barley	Oats	W.A.G.Y.	Index
1250 - 74	13.2	8.8	15.7	13.5	9.3	100
1275 - 79	14.9	10.3	15.8	13.8	10.3	111
1300 - 24	14.9	10.0	16.1	13.3	11.0	118
1325 - 49	15.6	10.5	17.2	15.0	11.9	127
1350 - 74	11.4	8.9	15.3	11.9	8.6	92
1375 - 99	12.9	10.1	17.3	14 .0	9.7	104
1400 - 24	12.7	9.9	14.9	13.9	8.0	86
1425 - 49	10.7	12.0	15.4	14.5	8.9	96

Norfolk Agriculture After the Black Death 1

- (1) **agricultural yields had peaked** in mid 14th century
- (2) **After the Black Death yields fell: WHY?**
- - **labour became too scarce** and expensive to permit such labour intensive husbandry
- **- Land relatively far more abundant**, more productive lands left in production: to feed a much smaller population

Norfolk Agriculture After the Black Death 2

- **So without ongoing or worsening demographic pressures**:
- → **farmers switched back to traditional Three-field systems** (with 1/3 in fallow).
- **Other evidence**: general decline in productivity on arable lands after the Black Death:
- **contradicts Ricardo model** (as seen before)

DAVID RICARDO (1772 - 1823)

ECONOMICS OF POPULATION DECLINE

(1) FALLING GRAIN PRICES:

- which would hurt those landlords operating commercial farms,
- but also hurt those peasants similarly producing grain surpluses for the markets.

(2) FALLING ECONOMIC RENTS:

- which would certainly hurt landlords,
- but also those peasants who had earlier managed to hold or to secure some portion of those economic rents produced by prior population growth

(3) RISING REAL WAGES: as a result of both:

(a) much more favourable land:labour ratio

- that should have increased the marginal productivity of labour (at least in agriculture, if not so obviously in industry)
- note: in Classical Theory, the Wage Rate = MRP_L, i.e. , the Marginal Revenue Product of Labour

(b) falling food prices and land/housing rents:

- a fall in the cost of living, with falling food prices
- note: the real wage is calculated as: NWI/CPI = RW
  i.e. , the Nominal Wage Index (money wages in silver) divided by the Consumer Price Index (the money cost of a basket of consumables and services)

Prices and Wages after Black Death 1

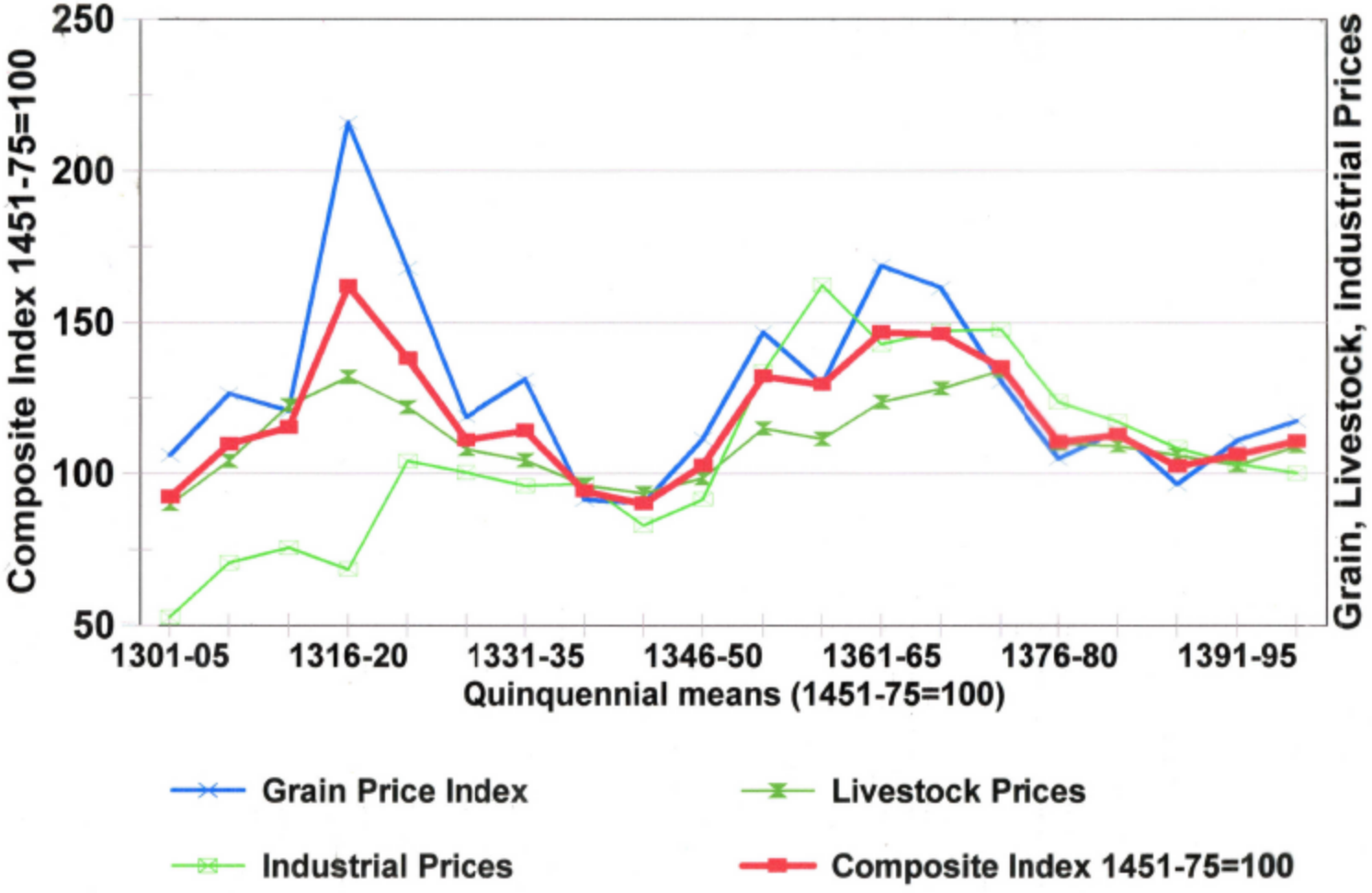
- (1) **Evidence on wages and prices also contradicts the standard Ricardo model**:
- - **all agricultural prices rose, not fell,** in generation following the **Black Death**
- - But in part: pure **monetary inflation**,
- - **nevertheless agricultural prices rose the most:**
- → **indicates that manorial demesne farming -- Gutsherrschaft -- remained prosperous**
- (2) **REAL wages fell, not rose, in immediate aftermath of Black Death:** but chiefly because inflation outpaced the rise in nominal money wages

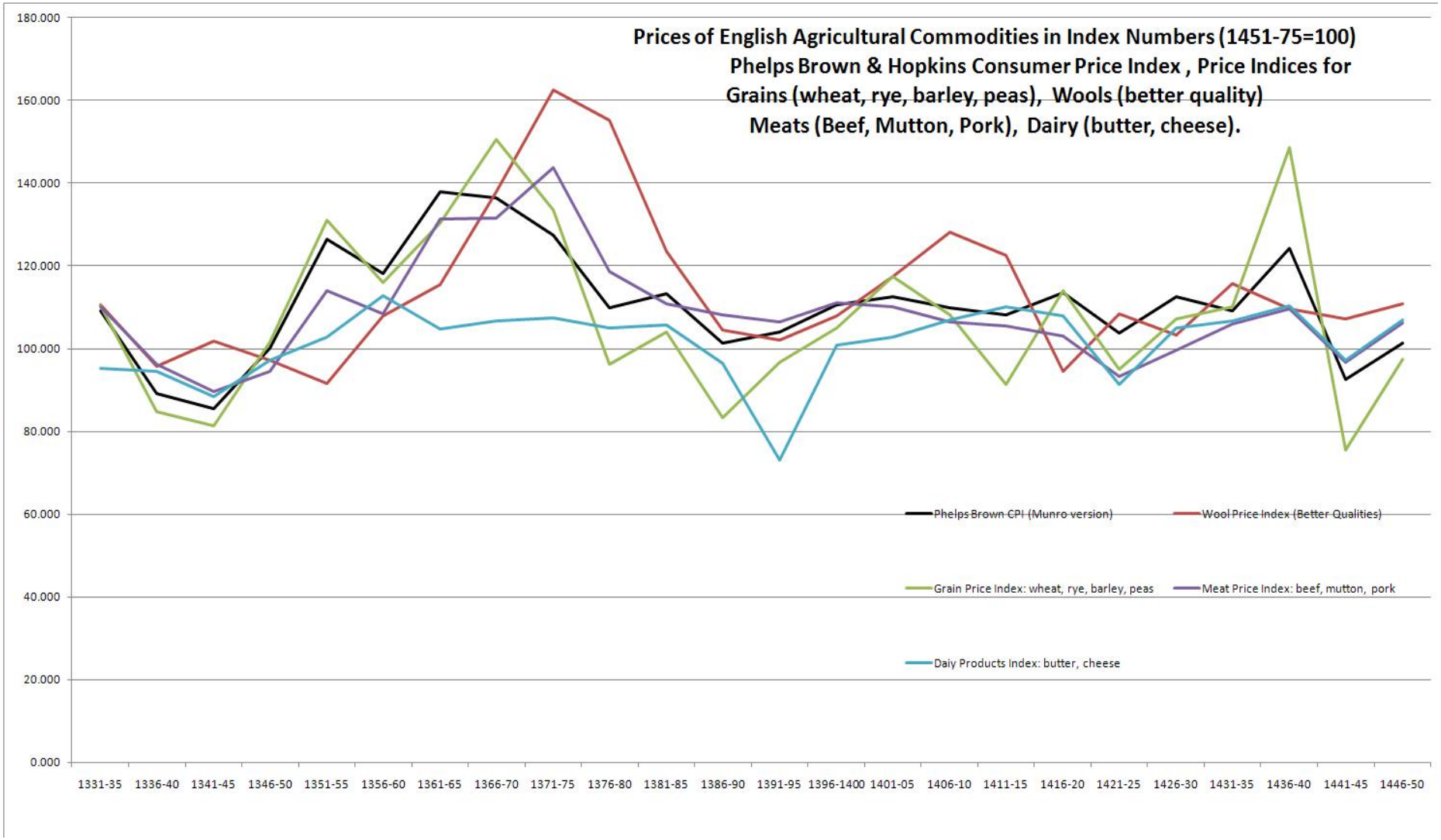
Prices and Wages after Black Death 2

- (3) **Manorial wages, however, rose less than did urban wages**:
- perhaps because of **Ordinance (1349) and Stature of Labourers (1351)**??
- - **but rural wages rose above Statute rates**: would they have risen even more without attempted enforcement of the Statute?
- (4) **Major Problem: the dramatic decline of manorial demesne agriculture did not happen for another thirty years, before 1370s:** i.e. that shift from **Gutsherrschaft** to **Grundherrschaft**

English Prices: 1301-1400

Farinaceous, Livestock, Industrial




Prices of English Agricultural Commodities in Index Numbers (1451-75=100)
Phelps Brown & Hopkins Consumer Price Index , Price Indices for
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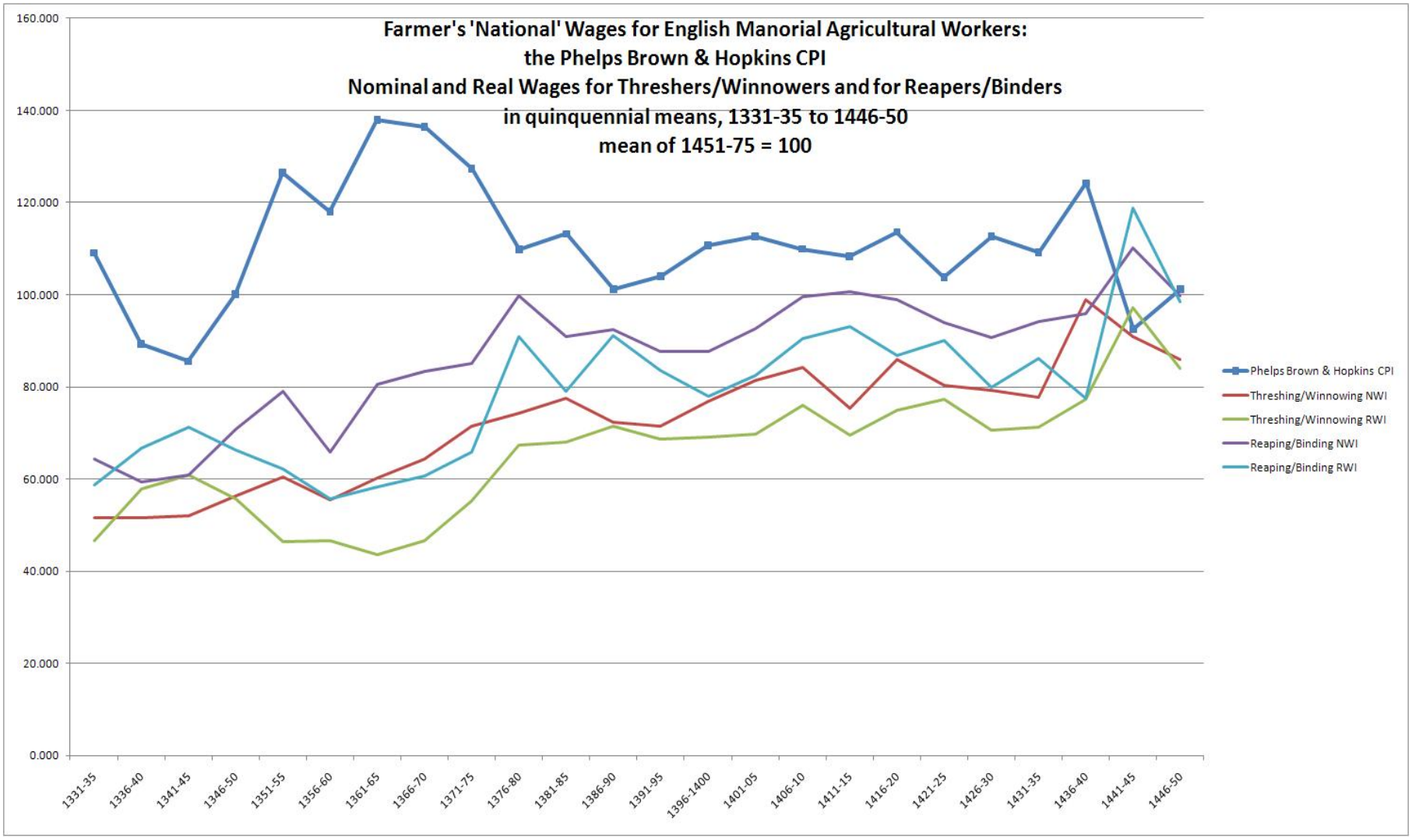
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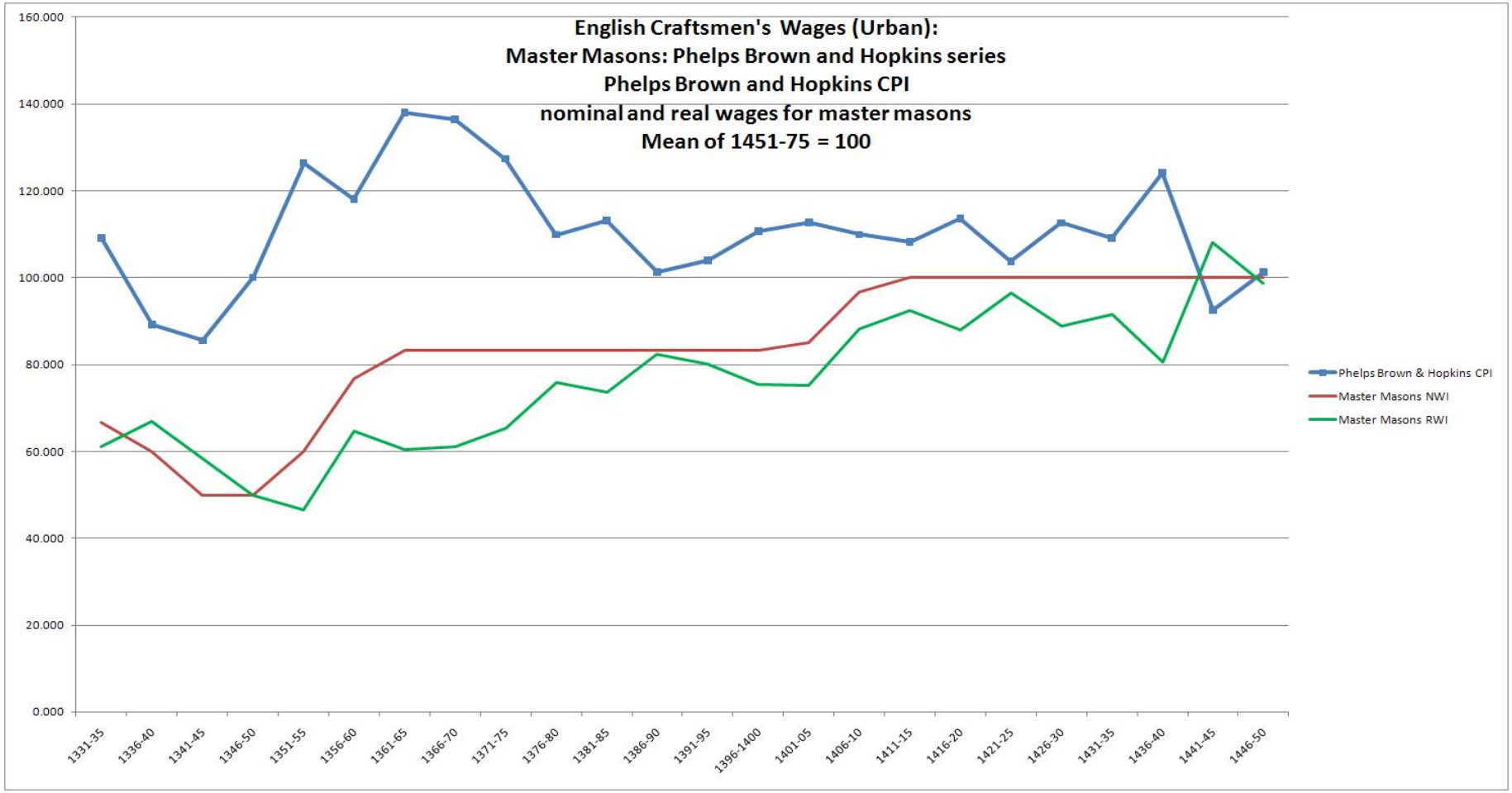
English Craftsmen's Wages (Urban):
Master Masons: Phelps Brown and Hopkins series
Phelps Brown and Hopkins CPI
nominal and real wages for master masons
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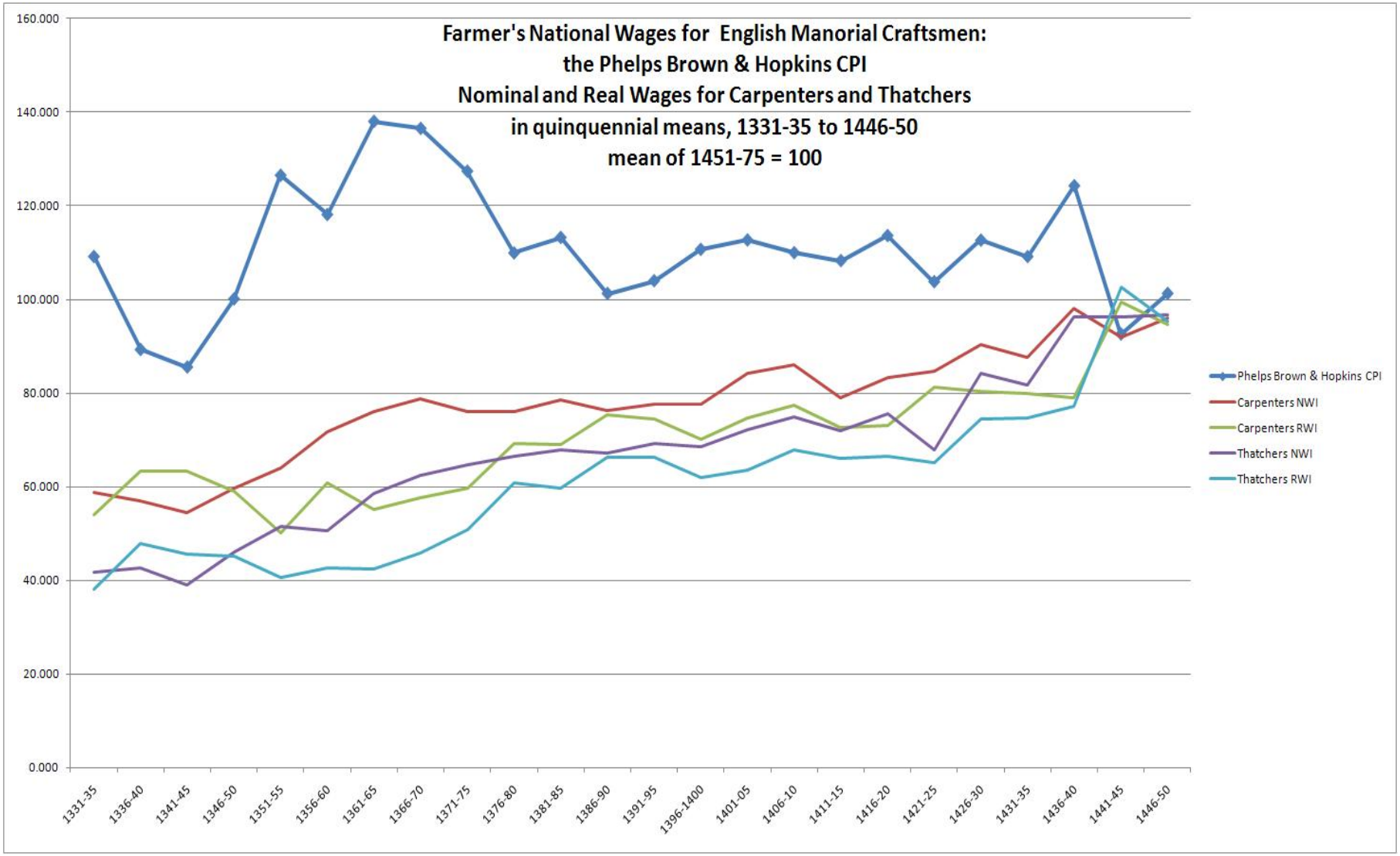
Master Masons NWI
Master Masons RWI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Phelps Brown & Hopkins CPI
Carpenters NWI
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Problem of the Time-Lag (1): 1348 to 1370s: 'Mind the Gap!'

- (1) **Bridbury's Demographic Explanation (1973):**
- '**The Black Death was quite incapable of altering the social and economic relationships** … because so much of the population was surplus by the fourteenth century that the early famines and mid-century pestilences were **more purgative than toxic**.'
- **Cites W. Arthur Lewis on 'unlimited supplies of labour'** in which the MP of labour is either zero or even negative.
- **Not until the 1370s (evidently) did population decline become severe** enough to 'activate' the Ricardian model.
- **Is this interpretation credible in terms of both theory and fact?**
- **Bridbury contradicts himself:** in later article on pre BD England, denying any overpopulation and any Malthusian crisis

The Time-Lag Problem (2): 1348 to 1370s : 'Feudal Reaction' Thesis

- (2) **The 'Feudal Reaction' Hypothesis**
- **Demographic/Institutional Model**:
- See: **the Marc Bloch model** on rise or expansion of serfdom:
- **That, in reaction to declining population and consequent labour scarcities, manorial lords used their coercive powers to** impose or strengthen serfdom (labour services)
- **to prevent peasants from exercising potential market powers**
- - to drive up wages and
- - to drive down rents.

The Time-Lag Problem (2): 1348 to 1370s : 'Feudal Reaction' Thesis 2

- (3) **Statute of Labourers (1350):** did wage controls restrict supply of free wage-labour → need to extract more servile labour?
- **But depends on not only lords' military and judicial powers** -- but also on costs of enforcing an expansion in servile obligations.
- (4) **Peasant Uprising of 1381**: Wat Tyler Revolt
- **Evidence for this 'feudal reaction' and its failure??** see last day's lecture on this same topic

Wat Tyler's death: London, 1381

Monetary/fiscal model: for decline of demesne agriculture

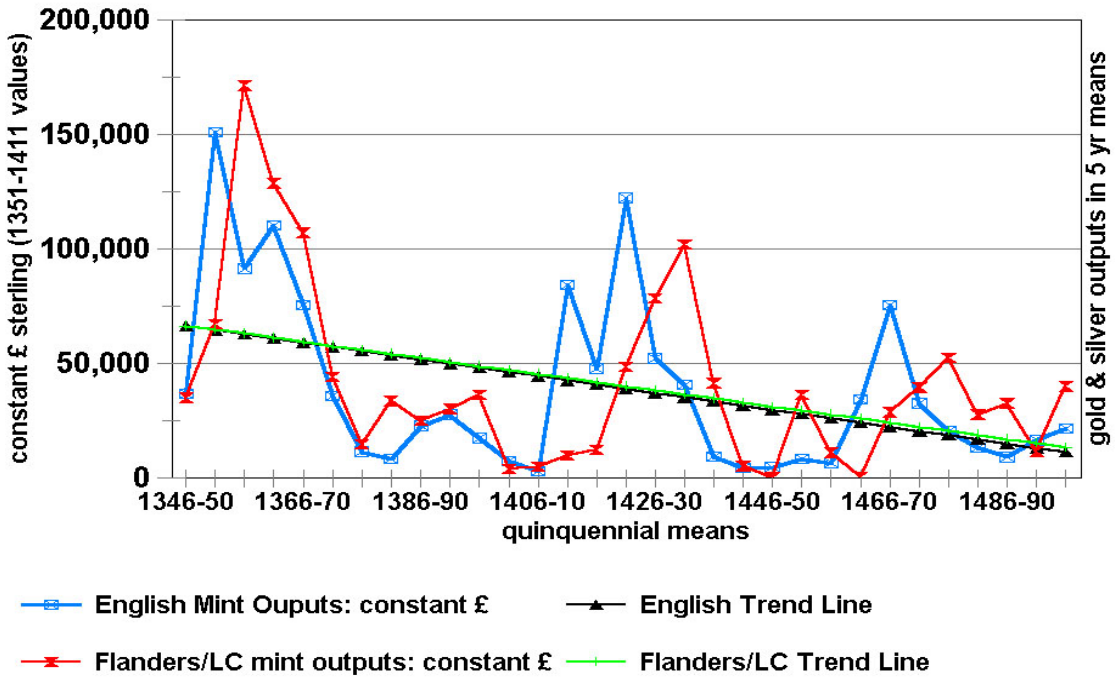
- **offered as a supplementary explanation**, to the Ricardo model
- **which also helps to explain:**
- (a) **the long time-lag between the catastrophe of the Black Death (1348)** and
- (b) **the much later 'collapse' of demesne agriculture (direct cultivation): from the 1370s** to the 1420s (approximately)
- (c) **and also: the decline of English serfdom from 1370s**

My monetary model (1)

- **First part of the model: based on my earlier publications on money, prices and wages** during the 'bullion famine' era of ca. 1370- ca. 1420,
- **contends that the steep fall in agricultural** commodity prices,
- **along with a lesser fall** in industrial prices,
- **constituted genuine monetary deflation:**
- a **25% decline in the Consumer Price Index**
- **See a graph for the 'bullion famine' ca. 1370-1420**

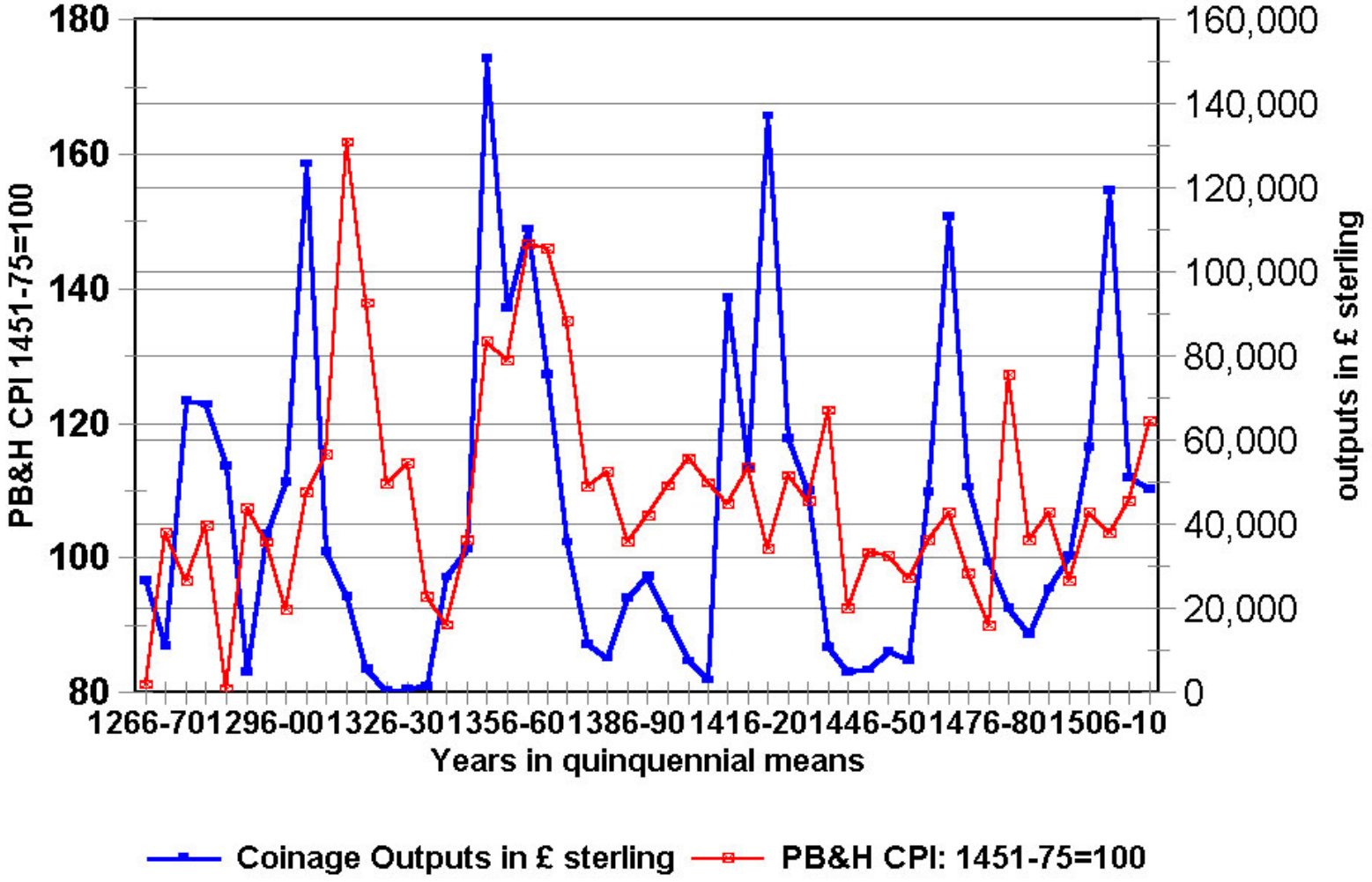
Mint Outputs of England & Flanders/LC

1346 - 1500 in constant £ sterling:



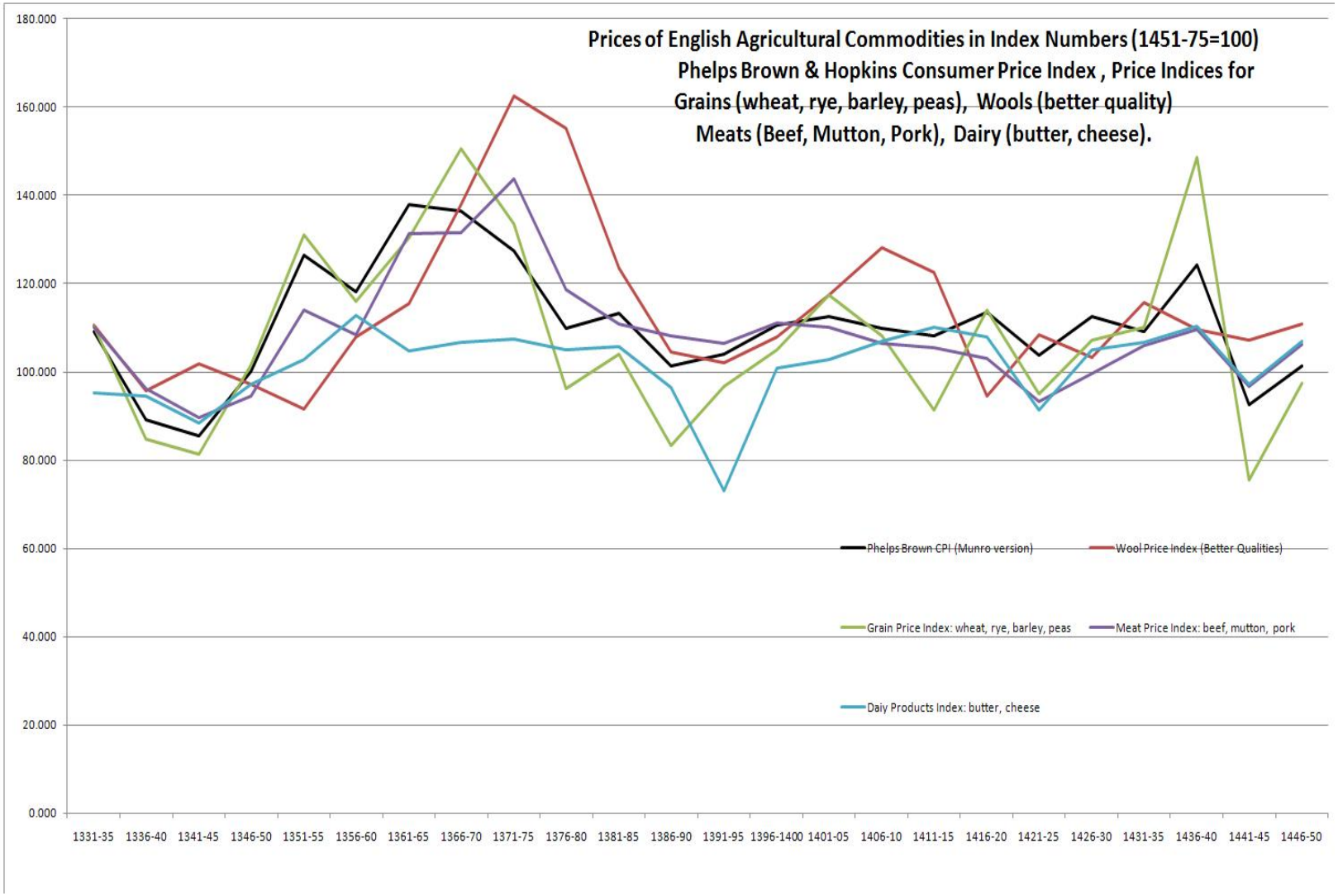
Coinage and Prices in England

Mint Outputs and CPI, 1264-1520



My monetary model (2)

- **Problem with the Ricardian demographic model**:
- **the logic of the 'real' demographic model** – as explained here – is that a fall **in grain prices,** produced by *real* factors,
- **would have liberated more consumer income to be spent on livestock products** (meat, dairy products, leather, woollen textiles, etc),
- **thus raising their prices** (nominal or *relative*?).
- **yet the fall in wool prices (42%) and other livestock prices (35%)** was commensurate with the fall in grain prices (39%)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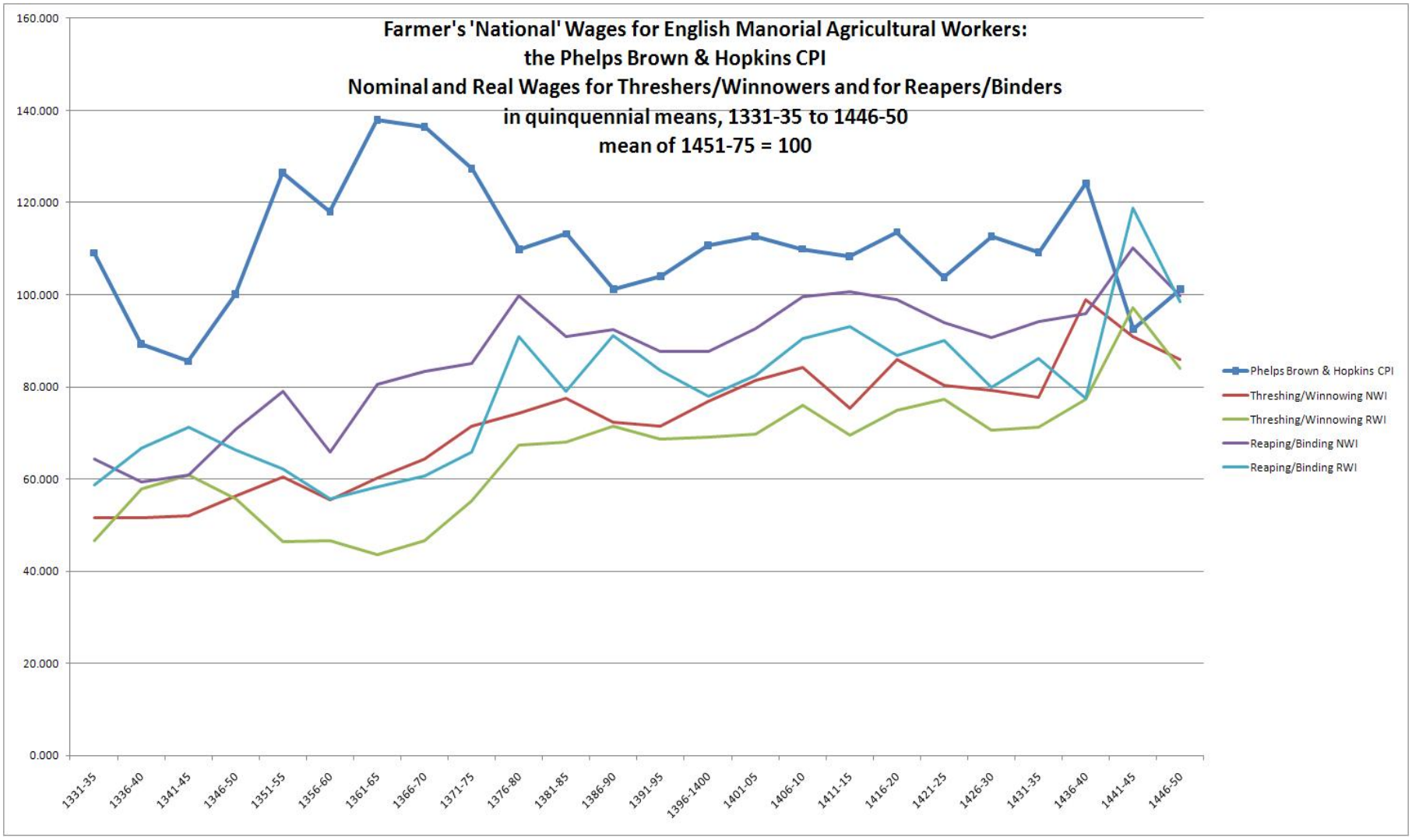
Monetary Model: Factor Prices

- **The next part of the model: deals with real factor prices: for labour and capital**
- (1) **undisputed fact that at least their nominal prices, in terms of wages and interest, did not fall** during this era (experienced 'wage stickiness')
- (2) **and thus that these *real* costs rose severely** for most manorial lords, ca. 1370-ca.1420
- i.e., **during the deflationary 'bullion famine' era.**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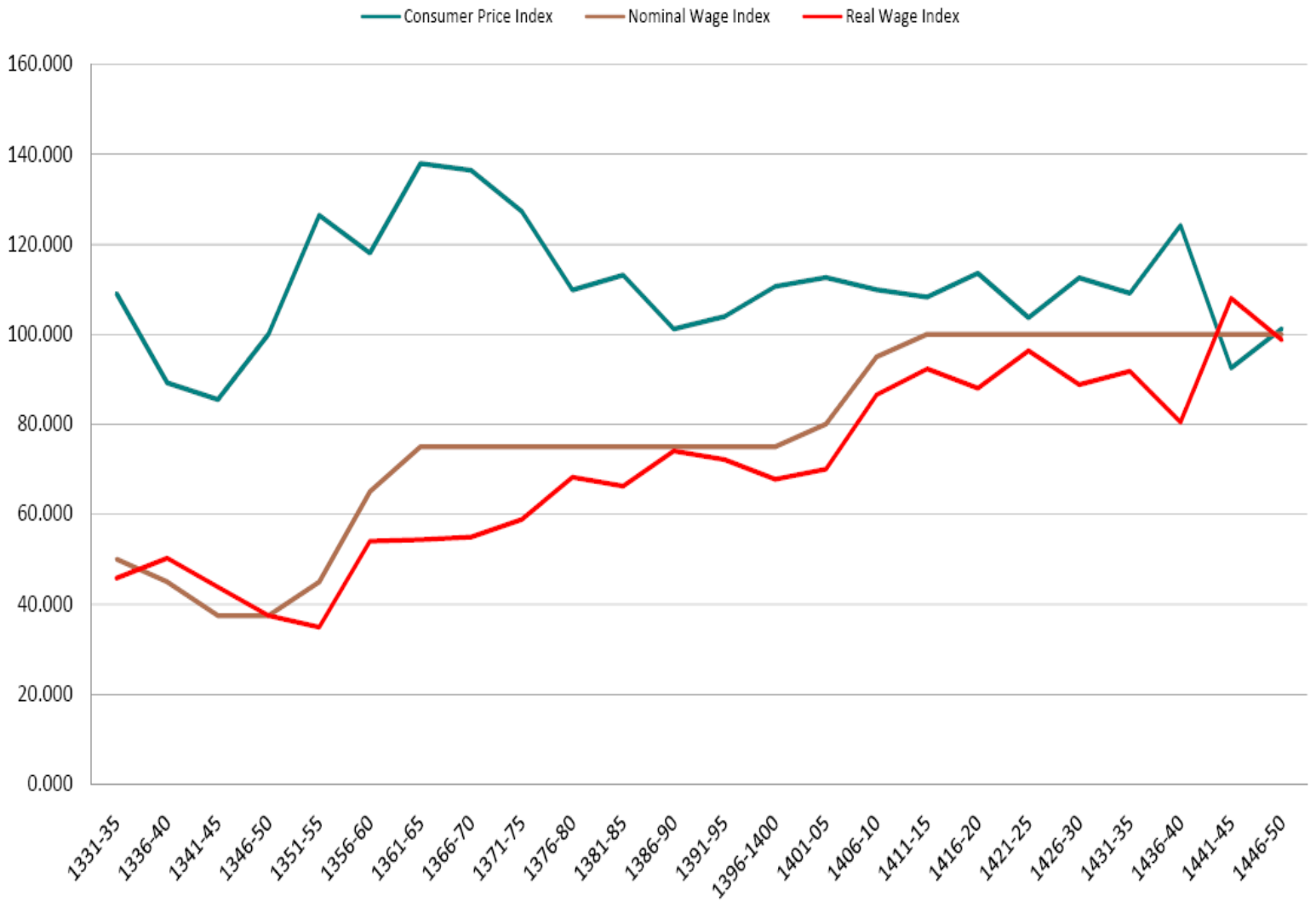
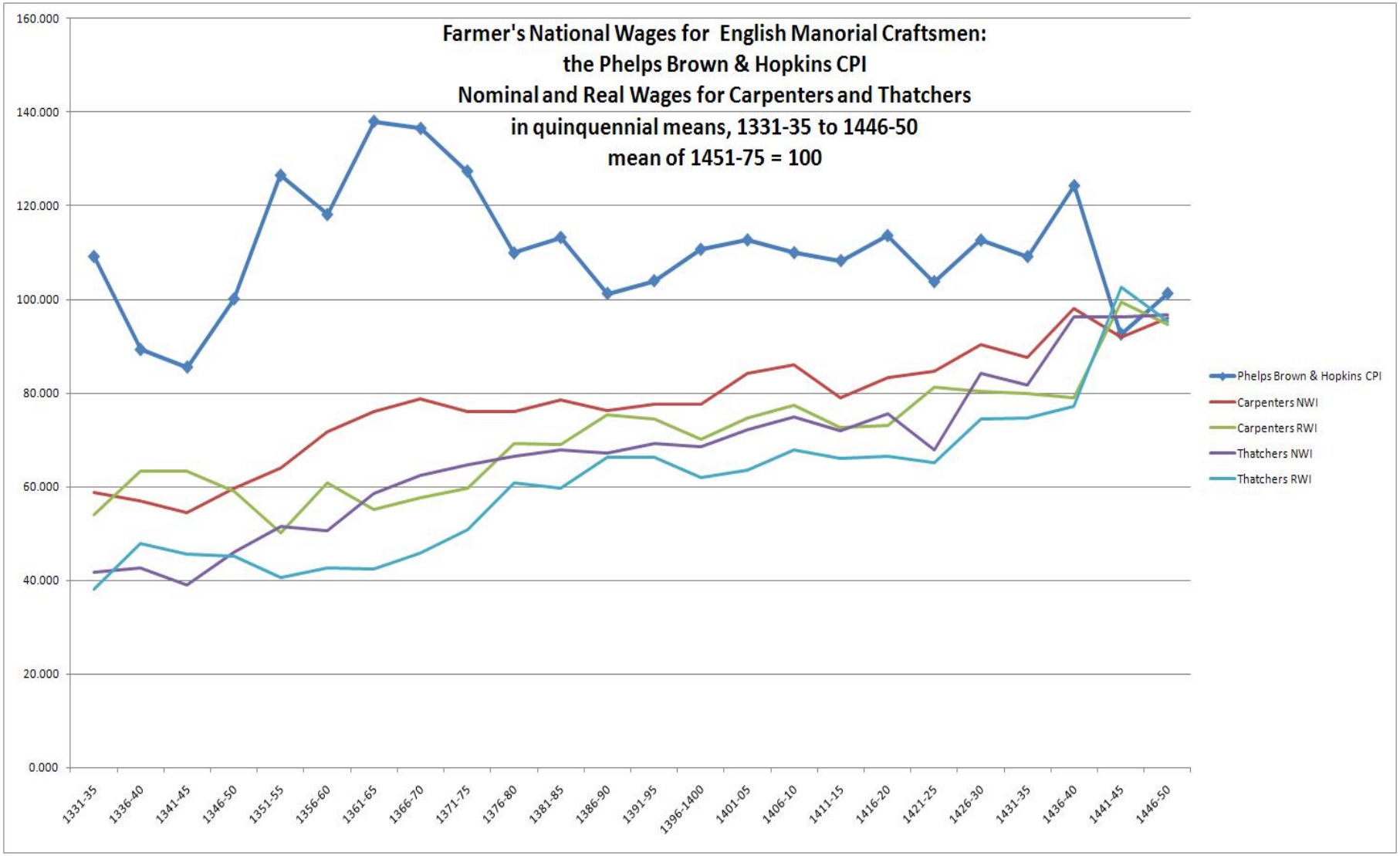
Builders' Labourers: Nominal and Real Wages
1331-35 to 1446-50 in 5 year means
mean of 1451-75 = 1

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My Fiscal Model: Taxation of the Wool Export Trade (1)

- **The final part of the model deals with fiscal policies: royal taxation of English wool exports**:
- (1) **Problem of the English Wool Export Trade:**
- (a) **as noted, England produced Europe's finest wools (before the 17th century):** voracious demand from continental cloth producers:
- Low Countries, northern France and Italy
- (b) **Structural shifts in international trade from the 1330s (from warfare) had momentous consequences:** to be explained in later Trade lecture

My Fiscal Model: Taxation of the Wool Export Trade (2)

- (2) **Structural shifts in international trade- promoted the relative growth in commerce in luxury products,**
- (a) **at expense of long-distance trade in cheaper products: especially in textiles**
- (c) **that shift favoured the luxury woollen cloth producers** in Italy and the Low Countries – **but also Italian silk textile producers**
- (d) **that shift thus also favoured English wool trade**

Taxation of the Wool Export Trade (3)

- (3) **WOOL TAXATION: Kings of England responded by extorting royal rents from the wool trade:**
- - **1275: taxation had begun modestly** under Edward I, @ 6s 8d per sack of wool (364 lb): just under 5%
- - **1337: Outbreak of Hundred Years War:**
- **Edward III** raised the wool export taxes and 'subsidy': to 40s per sack -- and more by mid 1340s
- - **initially the English wool growers – landed gentry, nobles, Church bore the tax incidence -** in lower wool prices
- **Parliamentary protests against royal wool-export taxes**
- **N.B. ratio of wool prices** to grains prices and CPI fell to 1360s

Taxation of Wool Export Trade (4)

- (4) **The Calais Wool Staple: 1363 - 1558**
- **Solution was found in creation of a royal export monopoly**: establishment of the Company of the Merchants Staplers at Calais: French port that Edward III's armies captured in 1347 (held to 1558)
- **Wool merchants' cartel organized to pass the tax incidence onto foreign buyers:** chiefly in the Low Countries: though not fully effective until 1390s
- (5) **Italians who shipped wool by sea:** from Southampton to Mediterranean were exempt from the Staple
- - but the Italians **paid far higher export taxes** than did English merchants in shipping wools abroad

Taxation of Wool Export Trade (5)

- (5) **Wool-Export Tax Problems:** **their impact**
- **- the wool export taxes were 'specific' (fixed) and not ad valorem** (i.e., not by percentage value)
- **- Thus the tax burden thus rose sharply with deflation** (the fall in wool-prices) –taxes rose from 31% of value of wool exports in 1371-75 to 50%, by 1391-95 (mean)
- (6) **For the chief customers, in the Low Countries:**
- **the Flemish and Brabantine woollen draperies:** these highly taxed English wools then constituted about **60%-70% of their textile production costs**

Taxation of Wool Export Trade (6)

- (7) **Demand for wool was not inelastic**
- **derived from demand for luxury woollens**, which was quite **elastic**, with **Δ competition from silk fabrics: chief threat to luxury woollens**
- (8) **Result: rapid decline of the Low Countries' urban draperies producing luxury woollens** (further internal reasons: explored later).
- (9) **The fate of the English wool trade: 1370-1420**
- - **During this period, the wool export trade fell 61% in volume:** only partially offset by the corresponding rise of the English cloth trade.

Taxation of Wool Export Trade (7)

- (10) **Flemish and Brabantine woollen draperies – cloth production indices, 1370 – 1420** - fell at least 80% (based on tax farms)
- (11) **Corresponding rise & expansion of the English cloth trade, from the 1360s:**
- - **result of growing taxation of wool, and decline of Low Countries' urban draperies:**
- - **because English cloth exports taxed only lightly** (about 2%-3%, vs. 40%-50% for wool)

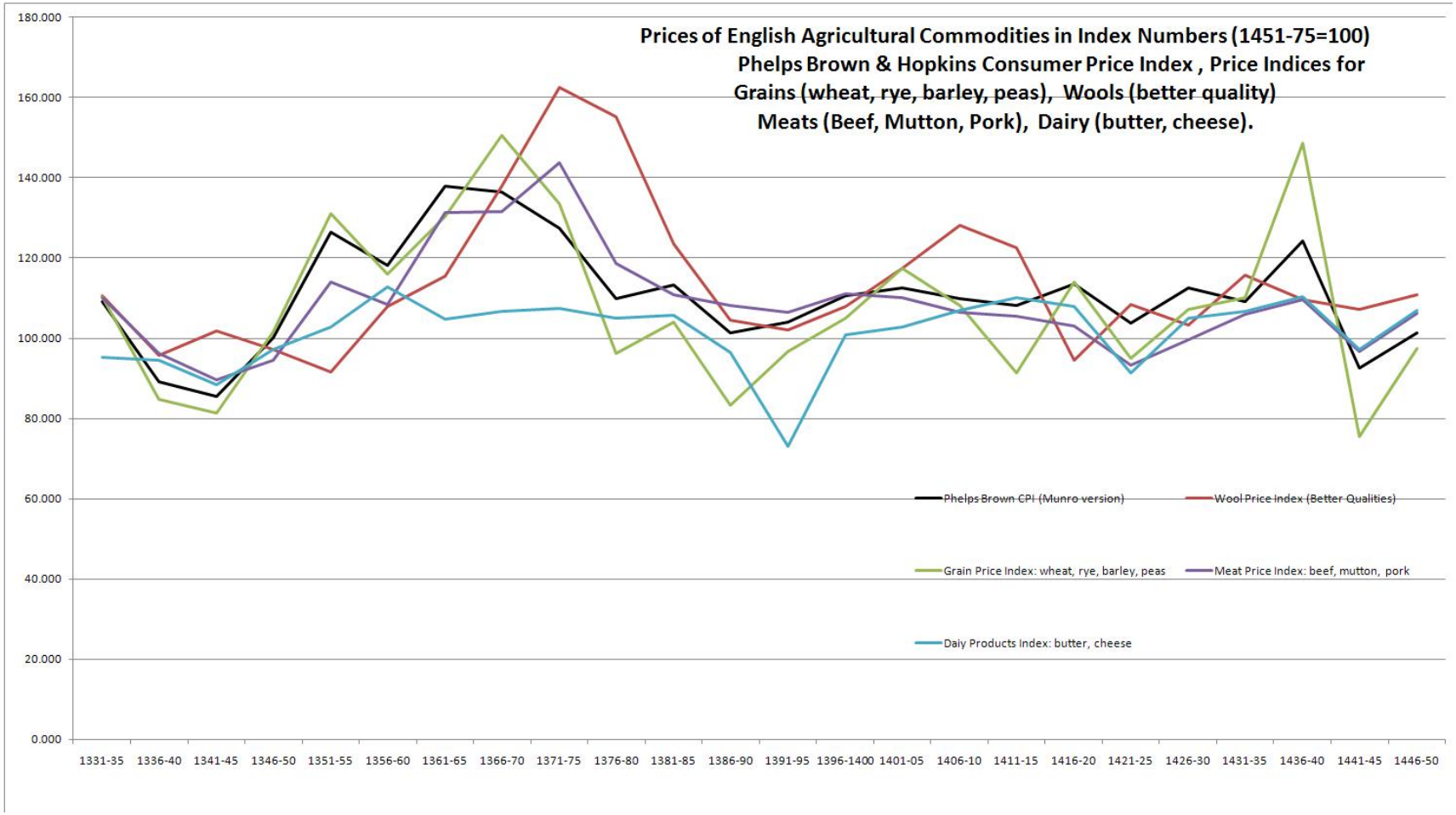

Prices of English Agricultural Commodities in Index Numbers (1451-75=100)
Phelps Brown & Hopkins Consumer Price Index , Price Indices for
Grains (wheat, rye, barley, peas), Wools (better quality)
Meats (Beef, Mutton, Pork), Dairy (butter, cheese).
180.000
160.000
140.000
120.000
100.000
80.000
60.000
40.000
20.000
0.000
1331-35
1336-40
1341-45
1346-50
1351-55
1356-60
1361-65
1366-70
1371-75
1376-80
1381-85
1386-90
1391-95
1396-1400
1401-05
1406-10
1411-15
1416-20
1421-25
1426-30
1431-35
1436-40
1441-45
1446-50
Phelps Brown CPI (Munro version)
Wool Price Index (Better Qualities)
Grain Price Index: wheat, rye, barley, peas
Meat Price Index: beef, mutton, pork
Daiy Products Index: butter, cheese

Table 1. **Price Indexes for the Phelps Brown & Hopkins 'Basket of Consumables' and for the Prices of Grains, Meat, Dairy Products, and Wool English Wools,**

mean of 1451- 1475 = 100

Year	Phelps Brown & Hopkins Composite Price Index (Revised)	Total Grains: wheat, rye, barley, peas Price Index	Meat Products beef, mutton swine Price Index	Dairy Products: butter & cheese Price Index	Wools: Better Qualities: Price Index
	base value in d 112.801d	base value in d 21.799d	base value in d 23.950d	base value in d 15.579d	base value in £ £4.8544
1331-35	109.108	110.302	110.021	95.281	110.614
1336-40	89.256	84.730	96.346	94.622	95.699
1341-45	85.533	81.356	89.666	88.547	101.910
1346-50	100.064	101.499	94.572	97.299	97.093
1351-55	126.472	131.100	113.987	102.921	91.577
1356-60	118.092	115.863	108.455	112.790	108.009
1361-65	137.976	130.413	131.419	104.738	115.474
1366-70	136.460	150.487	131.607	106.830	137.799
1371-75	127.345	133.638	143.653	107.403	162.637
1376-80	109.891	96.219	118.580	105.066	155.243
1381-85	113.190	104.029	110.890	105.709	123.494
1386-90	101.233	83.336	108.055	96.590	104.463
1391-95	103.953	96.639	106.471	73.130	102.039
1396-1400	110.648	105.084	111.064	100.898	107.966
1401-05	112.653	117.530	110.071	102.790	117.455
1406-10	109.927	108.229	106.555	106.878	128.114
1411-15	108.261	91.411	105.599	110.132	122.651
1416-20	113.598	114.066	103.055	107.879	94.586
1421-25	103.740	94.999	93.213	91.331	108.538
1426-30	112.610	107.222	99.581	104.979	103.298
1431-35	109.122	110.106	106.078	106.810	115.634
1436-40	124.218	148.525	109.585	110.342	109.627
1441-45	92.574	75.504	96.624	97.290	107.145
1446-50	101.241	97.399	106.245	106.978	110.796

Table 2. Ratios of Agricultural Prices to the Consumer Price Index (Phelps Brown & Hopkins) and to each other in quinquennial means, 1331-35 to 1446-50

mean of 1451-75 = 100

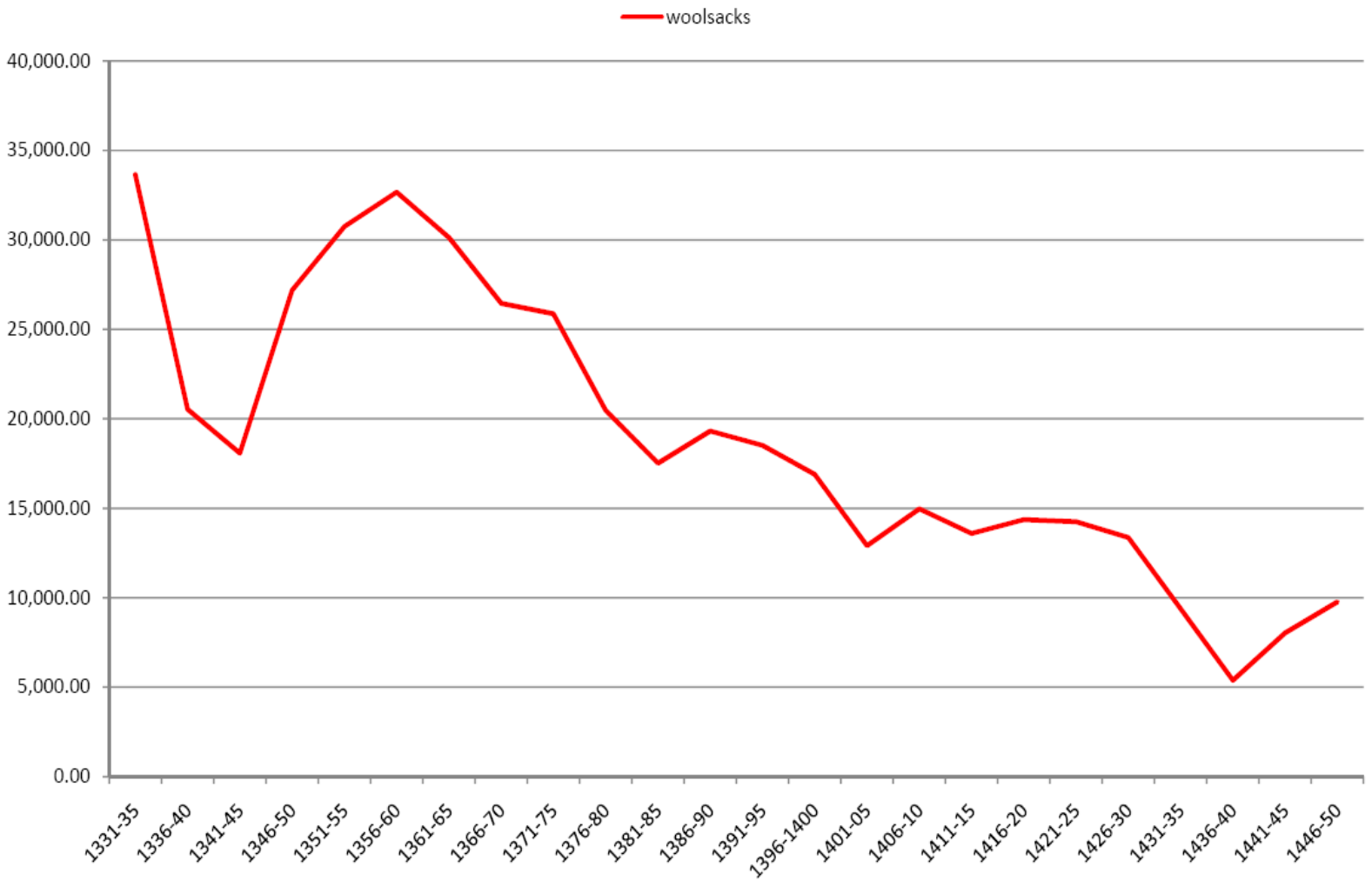
Year	Ratio of Wool Prices to PBH CPI (Wool/CPI)	Ratio of Wool Prices to Grain Prices	Ratio of Grain Prices to CPI	Ratio of Meat Prices to Grain Prices	Ratio of Meat Prices to Wool Prices	Ratio of Meat Prices to CPI	Ratio of Dairy Products to CPI
1331-35	101.380	100.283	93.384	99.745	99.463	100.837	87.328
1336-40	107.218	112.945	68.845	113.709	100.677	107.943	106.012
1341-45	119.146	125.265	80.805	110.215	87.985	104.831	103.524
1346-50	97.031	95.659	105.200	93.175	97.403	94.511	97.237
1351-55	72.409	69.853	116.148	86.947	124.471	90.128	81.379
1356-60	91.461	93.222	81.215	93.606	100.413	91.839	95.510
1361-65	83.691	88.545	97.901	100.772	113.809	95.248	75.910
1366-70	100.981	91.568	96.691	87.454	95.507	96.444	78.287
1371-75	127.713	121.700	86.819	107.494	88.327	112.806	84.340
1376-80	141.270	161.343	66.984	123.239	76.383	107.907	95.609
1381-85	109.103	118.711	83.923	106.595	89.794	97.968	93.391
1386-90	103.191	125.351	65.270	129.661	103.438	106.739	95.414
1391-95	98.159	105.588	84.629	110.175	104.344	102.423	70.350
1396-1400	97.576	102.743	89.617	105.691	102.869	100.376	91.188
1401-05	104.263	99.936	94.166	93.653	93.713	97.708	91.245
1406-10	116.545	118.372	85.171	98.453	83.172	96.933	97.226
1411-15	113.292	134.175	73.719	115.522	86.097	97.541	101.728
1416-20	83.264	82.922	93.405	90.347	108.954	90.719	94.966
1421-25	104.625	114.252	74.137	98.120	85.881	89.852	88.039
1426-30	91.731	96.340	91.627	92.874	96.402	88.430	93.223
1431-35	105.968	105.021	86.681	96.341	91.735	97.210	97.881
1436-40	88.254	73.810	120.664	73.783	99.962	88.220	88.829
1441-45	115.740	141.908	53.885	127.972	90.180	104.374	105.095
1446-50	109.438	113.754	93.273	109.081	95.892	104.942	105.667

Price Indexes for Wools with Index Numbers and the Phelps Brown and Hopkins Composite Price with export duties per wool sack

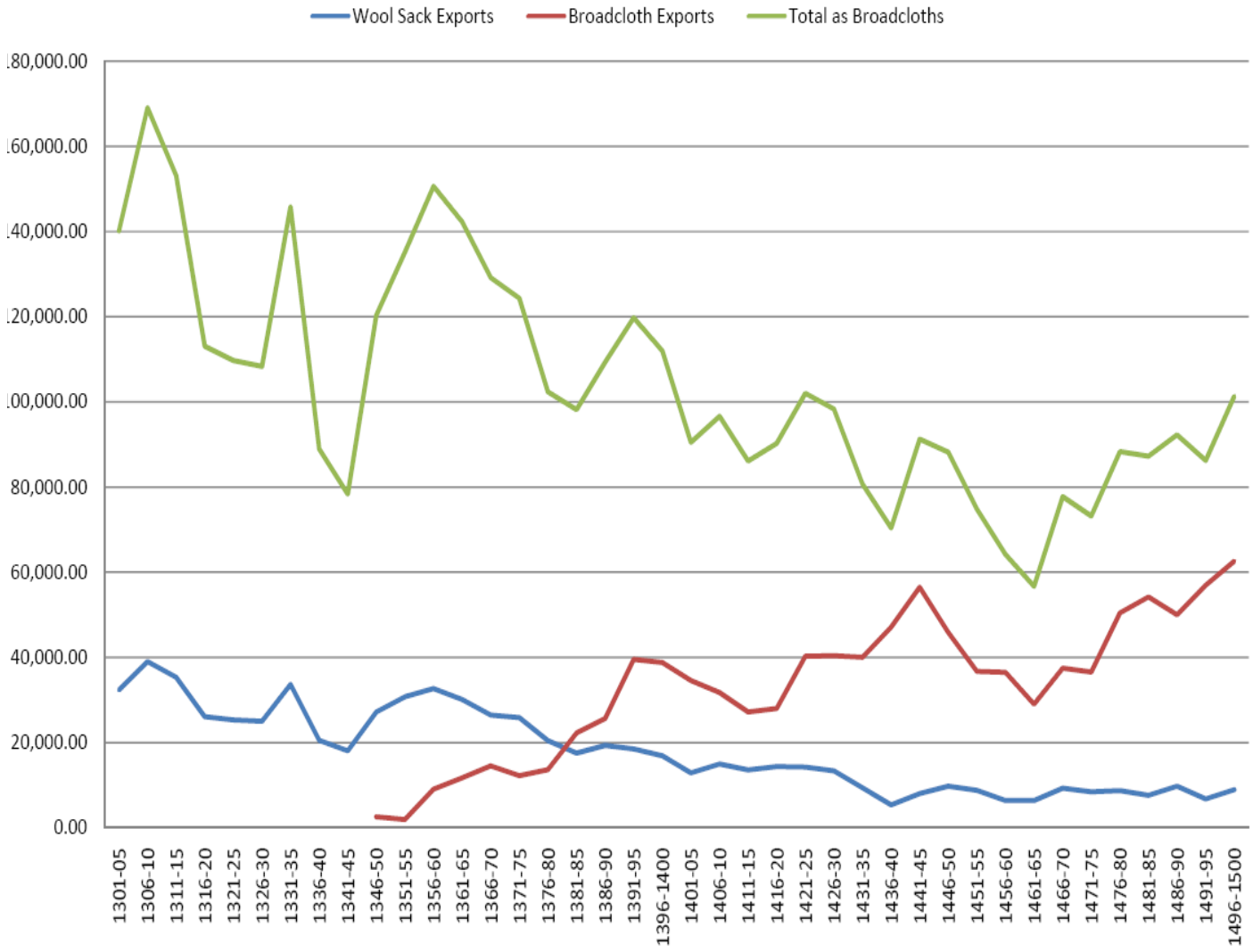
Price Index, in quinquennial means: from 1331-35 to 1446-50

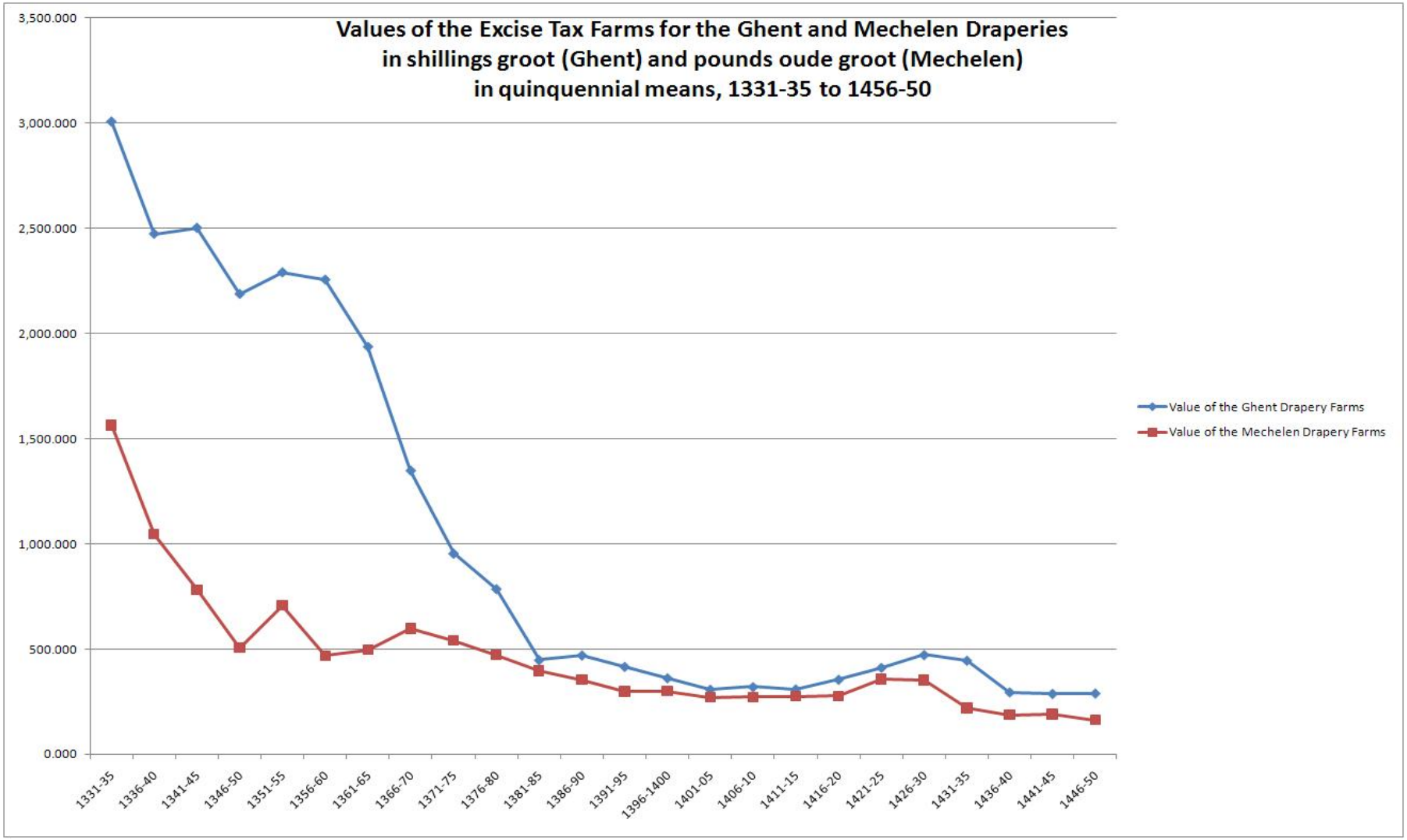
Year	Mean Price Sack Better Wools	Index 1451-75 =100 £4.8544	Phelps Brown & Hopkins CPI 1451-75 =100	Denizen Export Duties on Wool Sacks in shillings	Denizen Export Duties as Per Cent of Wool Prices	Alien Export Duties on Wool Sacks in shillings	Alien Export Duties as Per Cent of Wool Prices
1331-35	5.370	110.614	109.108	10.373	9.66%	14.559	13.56%
1336-40	4.646	95.699	89.256	29.556	31.81%	41.501	44.67%
1341-45	4.947	101.910	85.533	40.247	40.68%	43.333	43.80%
1346-50	4.713	97.093	100.064	40.000	42.43%	43.333	45.97%
1351-55	4.446	91.577	126.472	40.000	44.99%	43.333	48.74%
1356-60	5.243	108.009	118.092	40.000	38.14%	43.333	41.32%
1361-65	5.606	115.474	137.976	42.776	38.16%	46.110	41.13%
1366-70	6.689	137.799	136.460	46.667	34.88%	50.000	37.37%
1371-75	7.895	162.637	127.345	50.000	31.67%	53.333	33.78%
1376-80	7.536	155.243	109.891	50.000	33.17%	53.333	35.38%
1381-85	5.995	123.494	113.190	50.000	41.70%	53.333	44.48%
1386-90	5.071	104.463	101.233	48.516	47.84%	52.166	51.43%
1391-95	4.953	102.039	103.953	49.830	50.30%	53.163	53.66%
1396-1400	5.241	107.966	110.648	50.000	47.70%	56.555	53.95%
1401-05	5.702	117.455	112.653	51.187	44.89%	61.187	53.66%
1406-10	6.219	128.114	109.927	50.000	40.20%	60.000	48.24%
1411-15	5.954	122.651	108.261	50.000	41.99%	60.000	50.39%
1416-20	4.592	94.586	113.598	50.000	54.45%	68.000	74.05%
1421-25	5.269	108.538	103.740	43.841	41.60%	62.658	59.46%
1426-30	5.015	103.298	112.610	40.000	39.88%	53.333	53.18%
1431-35	5.613	115.634	109.122	40.000	35.63%	57.103	50.86%
1436-40	5.322	109.627	124.218	40.000	37.58%	62.267	58.50%
1441-45	5.201	107.145	92.574	40.000	38.45%	63.333	60.88%
1446-50	5.379	110.796	101.241	40.000	37.19%	63.333	58.88%

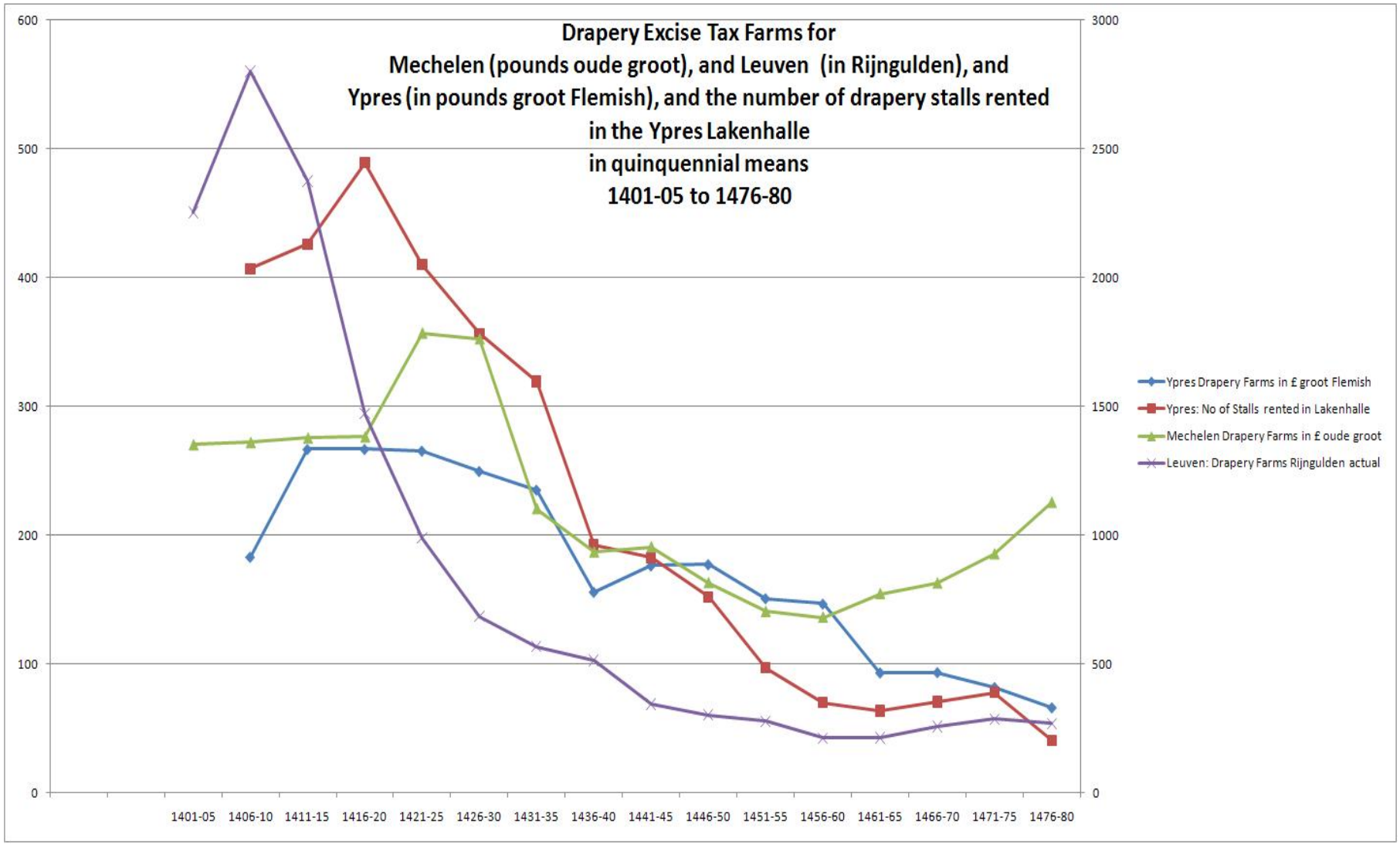
English Wool Exports in sacks (364 lb)
in 5 year means, 1331-35 to 1446-50



Exports of English Woolsacks and Broadcloths: in Quinquennial Means, 1301-05 to 1496-1500




Values of the Excise Tax Farms for the Ghent and Mechelen Draperies
in shillings groot (Ghent) and pounds oude groot (Mechelen)
in quinquennial means, 1331-35 to 1456-50
3,500.000
3,000.000
2,500.000
2,000.000
1,500.000
1,000.000
500.000
0.000
1331-35
1336-40
1341-45
1346-50
1351-55
1356-60
1361-65
1366-70
1371-75
1376-80
1381-85
1386-90
1391-95
1396-1400
1401-05
1406-10
1411-15
1416-20
1421-25
1426-30
1431-35
1436-40
1441-45
1446-50
Value of the Ghent Drapery Farms
Value of the Mechelen Drapery Farms


Drapery Excise Tax Farms for
Mechelen (pounds oude groot), and Leuven (in Rijngulden), and
Ypres (in pounds groot Flemish), and the number of drapery stalls rented
in the Ypres Lakenhalle
in quinquennial means
1401-05 to 1476-80
600
500
400
300
200
100
0
3000
2500
2000
1500
1000
500
0
1401-05
1406-10
1411-15
1416-20
1421-25
1426-30
1431-35
1436-40
1441-45
1446-50
1451-55
1456-60
1461-65
1466-70
1471-75
1476-80
Ypres Drapery Farms in £ groot Flemish
Ypres: No of Stalls rented in Lakenhalle
Mechelen Drapery Farms in £ oude groot
Leuven: Drapery Farms Rijngulden actual

Estimates of Florentine Woollen Cloth Outputs: using English wools

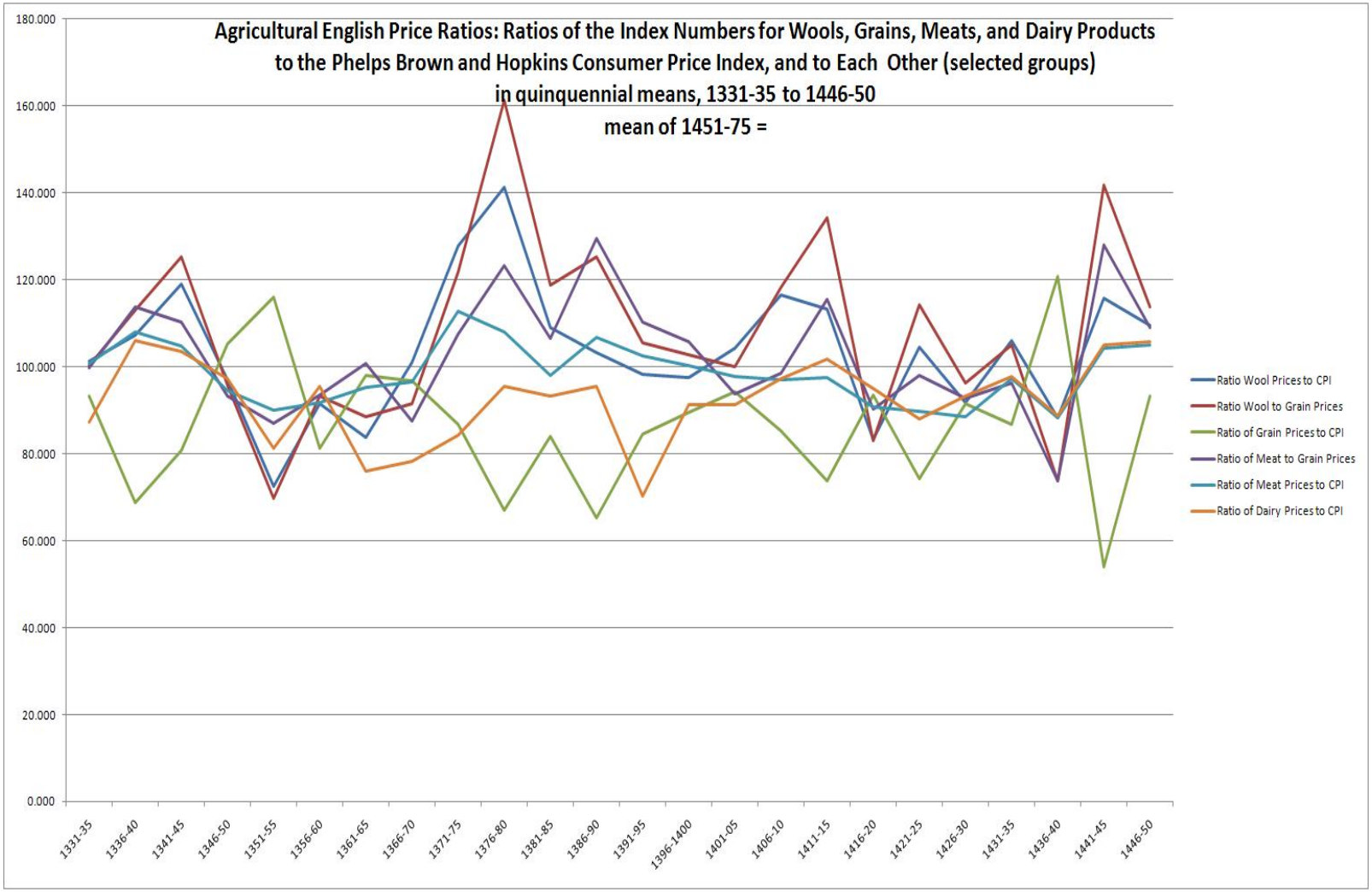
Year	Cloth Outputs: bolts of 36 metres
1338	75,000
1355-73 (annual mean)	49,000
1373	30,000
1382	19,926
1389	16,482
1390	10,000
1392	12,690
1395	13,672
1425	9,052
1430	10,049
1433	8,333

The Role of the Italians (Aliens) in the Exports of English Wools (in sacks) in quinquennial means, 1301-05 to 1496-1500

Year from Michaelmas 5 year means	Denizen Wool Exports	Percent Total	Alien Wool Exports	Percent Total	Total Wool sacks
1301-05					32,344.00
1306-10	23,041.60	59.30%	15,974.60	40.70%	39,016.20
1311-15					35,328.60
1316-20					26,084.60
1321-25	14,074.30	55.56%	11,241.73	44.44%	25,315.40
1326-30	17,888.87	70.76%	7,108.73	29.24%	24,997.60
1331-35	24,633.00	72.97%	9,012.60	27.03%	33,645.60
1336-40	13,180.00	69.44%	7,344.80	30.56%	20,524.80
1341-45	10,565.51	58.09%	7,510.07	41.91%	18,075.58
1346-50					27,183.13
1351-55	10,169.40	34.39%	20,581.00	65.61%	30,750.40
1356-60					32,666.40
1361-65	20,899.95	69.03%	9,229.25	30.97%	30,129.20
1366-70	16,345.60	56.81%	10,106.20	43.19%	26,451.80
1371-75	16,712.02	64.39%	9,155.78	35.61%	25,867.80
1376-80	16,898.00	82.67%	3,572.20	17.33%	20,470.20
1381-85	13,886.80	78.97%	3,630.60	21.03%	17,517.40
1386-90	15,574.20	80.07%	3,737.80	19.93%	19,312.00
1391-95	13,593.20	72.00%	4,920.60	28.00%	18,513.80
1396-1400	14,515.80	86.15%	2,373.80	13.85%	16,889.60
1401-05	11,803.40	91.57%	1,100.80	8.43%	12,904.20
1406-10	13,392.80	89.41%	1,575.40	10.59%	14,968.20
1411-15	12,633.20	92.72%	960.00	7.28%	13,593.20
1416-20	13,355.40	92.98%	1,009.60	7.02%	14,365.00
1421-25	13,363.60	93.77%	881.60	6.23%	14,245.20

The reaction of English manorial lords to falling prices:1

- (1) **Note: ALL agricultural prices fell from the 1370s**
- **but grain prices fell more than livestock prices: for wool, meat, dairy products; wool prices more so than meat prices**
- (2) **some manorial lords were able to survive by switching from both arable and wool-oriented sheep-raising:**
- **to the production of other livestock products**
- (3) **Bruce Campbell's agrarian statistics:** indicate that many lords did shift their demesne production more and more from arable (grains) to livestock products, other than wools
- (4) **My statistics indicate good reason to do so: a shift in *relative* prices against grains and wool production-**
- **in favour of producing other livestock products**: meat (mutton, beef, swine), dairy products (butter, cheese, milk), leather (hides) – such prices did not fall as much as grain/wool prices


Agricultural English Price Ratios: Ratios of the Index Numbers for Wools, Grains, Meats, and Dairy Products to the Phelps Brown and Hopkins Consumer Price Index, and to Each Other (selected groups) in quinquennial means, 1331-35 to 1446-50
mean of 1451-75 =
180.000
160.000
140.000
120.000
100.000
80.000
60.000
40.000
20.000
0.000
1331-35
1336-40
1341-45
1346-50
1351-55
1356-60
1361-65
1366-70
1371-75
1376-80
1381-85
1386-90
1391-95
1396-1400
1401-05
1406-10
1411-15
1416-20
1421-25
1426-30
1431-35
1436-40
1441-45
1446-50
Ratio Wool Prices to CPI
Ratio Wool to Grain Prices
Ratio of Grain Prices to CPI
Ratio of Meat to Grain Prices
Ratio of Meat Prices to CPI
Ratio of Dairy Prices to CPI

The Reaction of English Manorial Lords to Adversities: 2

- **(1) Many English manorial lords were not able to effect this transformation**, which required **more capital**
- **(2) Their problems: they were faced with a serious price-cost scissors**
- **rising real labour costs** – so important in grain cultivation
- **and rising capital costs:** real interest rates
- **and with sharply falling prices** for almost all agricultural products, and
- **(3) Wool Sales: possibly even steeper declines**
- **since the evidence does not indicate that wool sales to domestic clothiers** even came close to compensating for falling sales to the Calais Staple merchants

The Manorial shift to Grundherrschaft

- (1) **Many English manorial lords** – possibly more so ecclesiastical than lay -- found a much better economic solution in leasing their demesnes,
- **with a shift to *Grundherrschaft:***
- (2) **Which thus meant leasing their demesne lands, for fixed cash rents**, without requiring any servile labour obligations: leases of 7, 10, 20, or 99 years
- (3) **Their real gains:**
- received **fixed rental incomes**, often for long terms, whose ***real* value thus rose with deflation.**

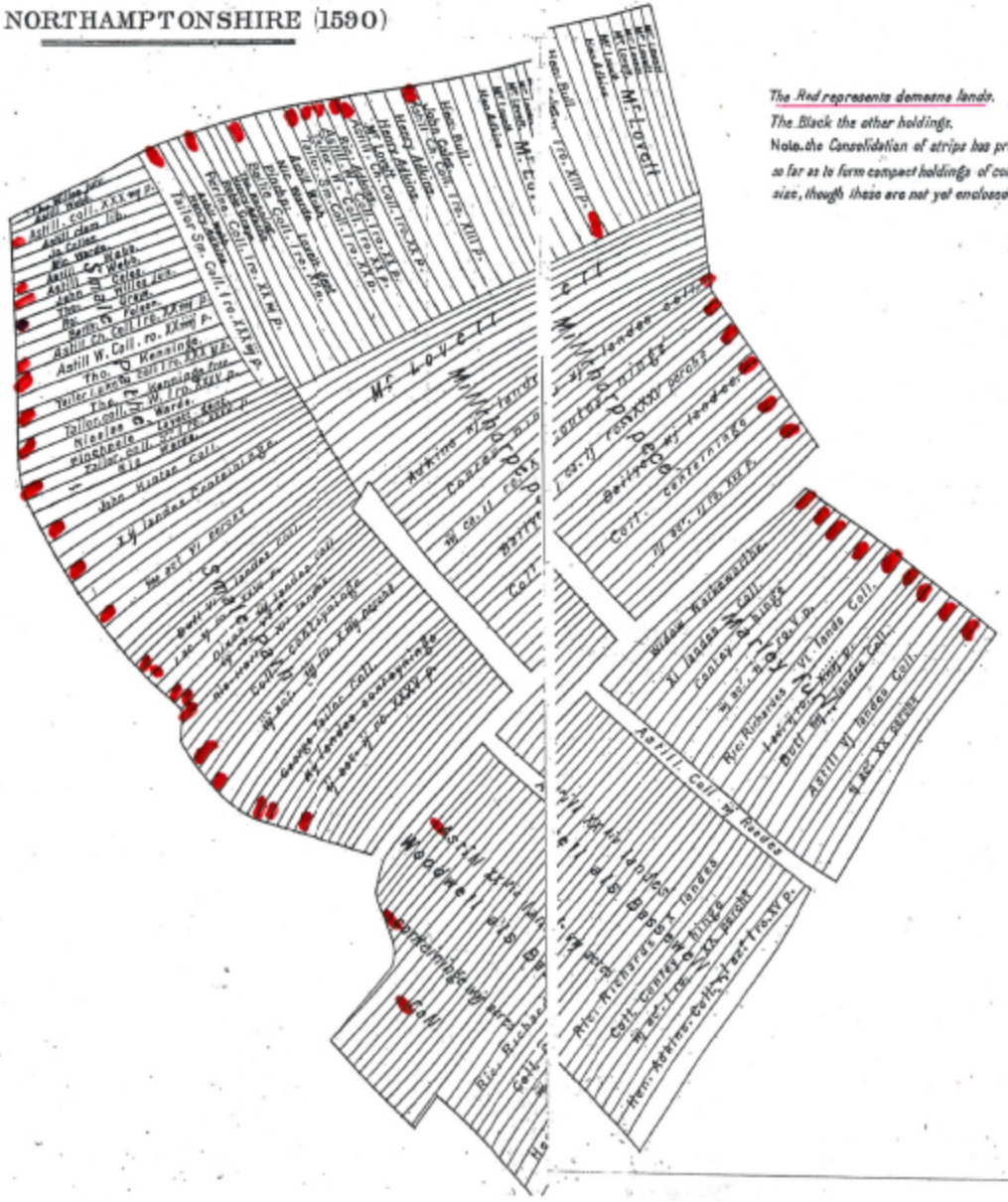
Reaction of Manorial Tenants: 2

- **(1) The late-medieval English peasantry: gains or losses?**
- **The burden of rising wages and falling prices** for grains and wools was thus **transferred to their peasant tenants**
- **who probably still welcomed more land to work** and more personal freedom, both economic and personal, a fair 'trade-off' for the 'end of serfdom'.
- **(2) Peasants who evidently benefited the most:**
- were those with the best access to capital, though they also faced problems of higher cost capital.
- **(3) Chief capital requirement: for livestock** (cattle, sheep, pigs, goats)

Extent of Manorial Contraction

- (1) **Varied regionally:**
- - **weakest in the North**: less manorialized, and more pastoral farming (already)
- - **strongest in the South**
- - **about average in the Midlands:**
- (2) **overall statistics:** contraction of about 30% in manorial demense agriculture, compared to perhaps 50% decline in the population
- (3) **with demesne leasing, many landlords had their remaining demesne strips amalgamated into the village Open Fields**: for gains in both **communal ploughing & manuring** (as noted before)

V. MAP OF PART OF THE MANOR OF WEEDON WESTON IN NORTHAMPTONSHIRE (1590)



Changes in Arable Crop Production

- (1) **Statistics of Bruce Campbell: on changes in arable crops production** on demesne after the Black Death
- (a) **rye (winter fields) and oats (spring fields)**: very significant reduction in cultivation
- (b) **winter wheat:** very slight decline
- (c) **barley (brewing) and legumes (spring)**: experienced **biggest relative increase**:
- (2) **Ramsey Abbey estates (north)**: relative decline in both rye and wheat production, and relative rise in both barley and legumes
- (3) **no evidence of increased fertility and land productivity** from growing more legumes – peas and beans weak in nitrogen
- (4) **Grain Yields and Arable Productivity:** on average, fell in century following the Black Death
- – did not rise, as Ricardo model predicts

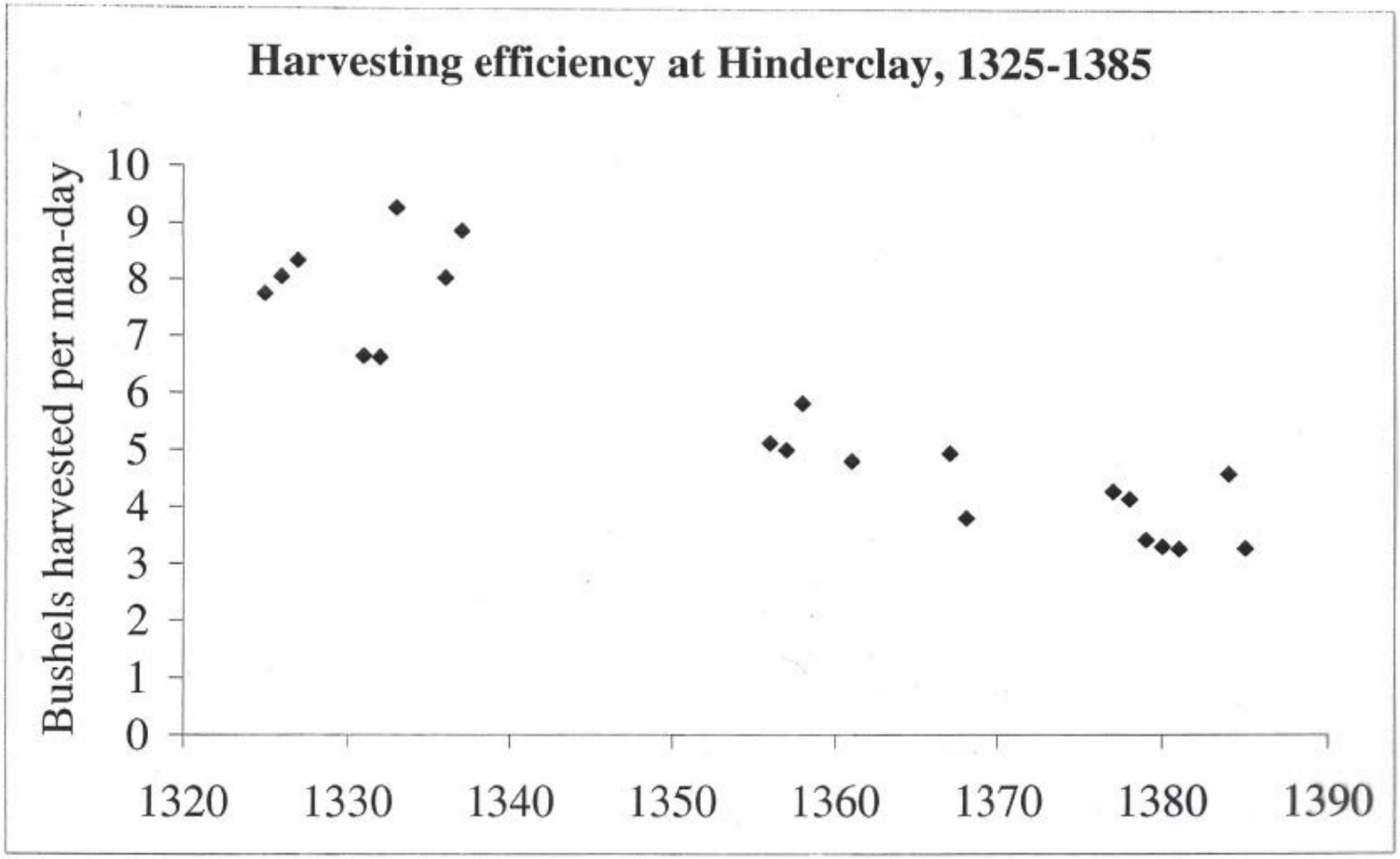
Norfolk: Gross Crop Yields, in Bushels per Acre

1250 - 1740: 1250-74 = 100

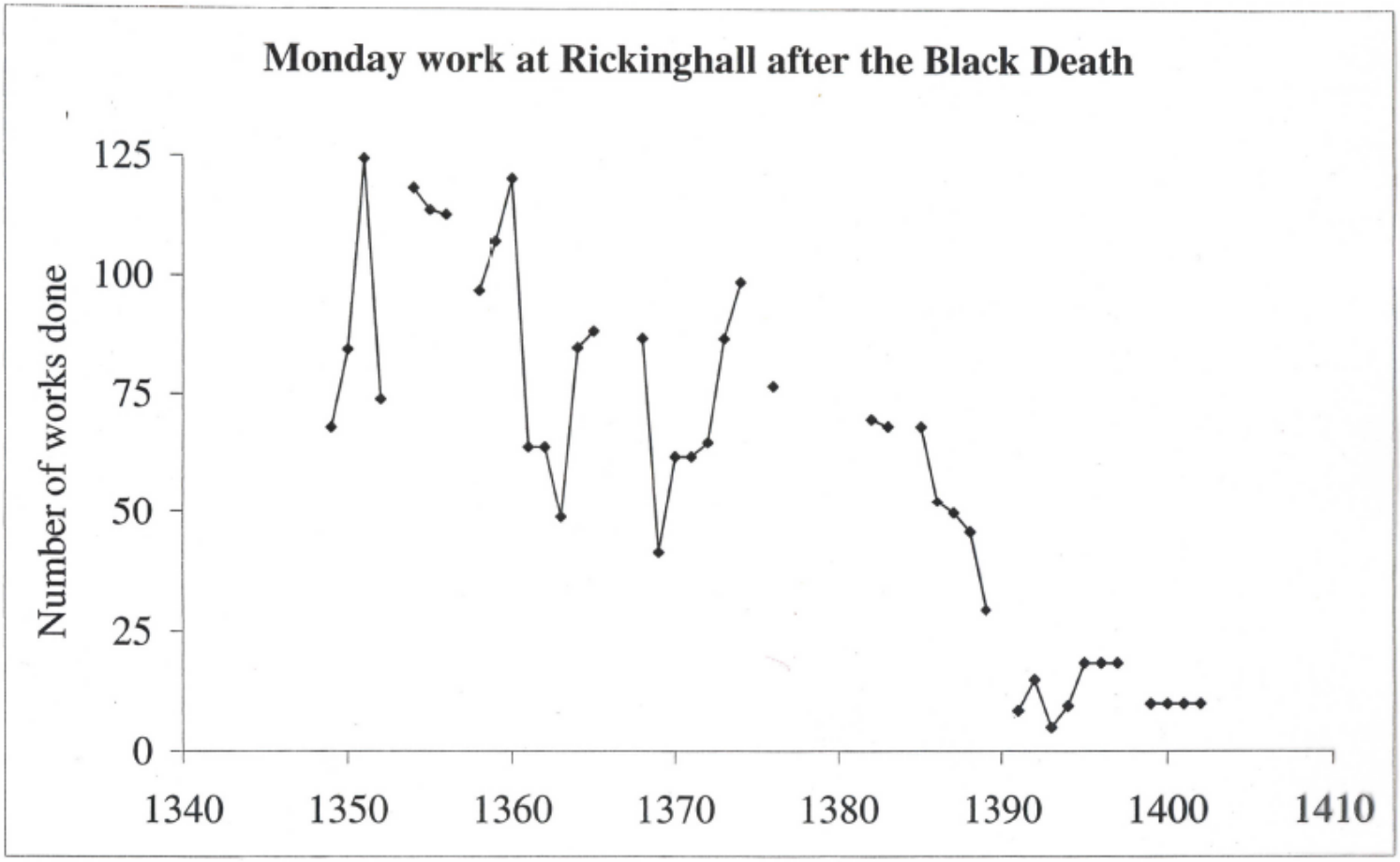
Years	Wheat	Rye	Barley	Oats	W.A.G.Y.	Index
1250 - 74	13.2	8.8	15.7	13.5	9.3	100
1275 - 79	14.9	10.3	15.8	13.8	10.3	111
1300 - 24	14.9	10.0	16.1	13.3	11.0	118
1325 - 49	15.6	10.5	17.2	15.0	11.9	127
1350 - 74	11.4	8.9	15.3	11.9	8.6	92
1375 - 99	12.9	10.1	17.3	14 .0	9.7	104
1400 - 24	12.7	9.9	14.9	13.9	8.0	86
1425 - 49	10.7	12.0	15.4	14.5	8.9	96

Changes in Crops Sown in England: by crop and by region from 1250-1349 to 1350-1449, on demesne lands only							
PLACE	Crops		From 1250		From 1350		Percent
	Mean percentage sown		to 1349		to 1449		Change
ENGLAND	Wheat		33.70		30.40		-9.79%
all	Rye		4.90		2.90		-40.82%
counties	Barley		15.00		22.60		50.67%
	Oats		31.30		23.50		-24.92%
	Mixed Grains		6.40		6.20		-3.13%
	Legumes		8.70		14.10		62.07%
	Mean Total Sown Acres		188.60		151.60		-19.62%
	No. of Demesnes		473.00		308.00		-34.88%
FTC *	Wheat		32.90		32.10		-2.43%
COUNTIES	Rye		6.10		2.20		-63.93%
[1288-	Barley		10.70		18.40		71.96%
1315]	Oats		30.40		22.50		-25.99%
	Mixed Grains		10.50		10.20		-2.86%
	Legumes		9.40		14.60		55.32%

Evidence for declining labour productivity (David Stone)



Evidence for declining labour productivity (David Stone)- 2



Was there a shift from arable to livestock agriculture from 1370s?

- (1) **Eileen Power, *Wool Trade in English Medieval History*** (1941): 'It is difficult to find signs of that whole-sale substitution of pasture for arable farming which, according to textbooks, happened after the Black Death.' Repeated in many textbooks since then
- (2) **But, as noted above, the behavior of relative prices** does show a relative shift in favour of other livestock prices
- (3) **Evidence for rising productivity in pastoral farming** (opposite of arable): meaning that fewer men were required to manage herds and flocks per acre

Was there a shift from arable to livestock agriculture from 1370s?

- (4) **ENGELS LAW:**
- **With rising real wages and perhaps other incomes from the 1370s, and falling grain prices,** we expect to find a relative shift in disposable income and thus in demand
- → **to favour production and consumption of various livestock products** (and other non-grain arable crops)
- : i.e., meat, dairy products (milk, butter, cheese), leather (hides) and even wool, for domestic textile consumption
- (5) **Bruce Campbell's statistics**:
- - relative increase in manorial incomes from livestock products
- - reflected in increased livestock ratios: 'stocking ratios'

Land Use in Terms of Arable and Livestock in Manorial Demesne Agriculture

Years	ENGLAND: Manorial (Seigniorial) Demesne Lands							
	Mean Cropped Areas:			Mean Livestock Units		Mean Stocking Densities per 100 grain acres		
	Sown Acres	Grain Acres	Grain as % of Total	All Livestock[a]	Non-Working[b]	All Livestock[a]	Non-Working[b]	Index NWL 1300-49=100
1250 - 1299	189.20	176.70	93.39%	64.20	36.20	40.60	21.80	63.00
1300 - 1349	172.10	155.70	90.47%	64.80	39.00	59.00	34.60	100.00
1350 - 1399	147.10	124.90	84.91%	75.00	51.40	63.70	47.20	136.40
1400 - 1450	142.80	117.40	82.21%	89.30	62.80	92.10	66.60	192.50
	Norfolk: Manorial (Seigniorial) Demesne Lands							
1250 - 1299	172.90	149.20	86.29%	45.60	29.50	30.50	19.80	74.20
1300 - 1349	146.00	126.60	86.71%	45.90	33.80	36.30	26.70	100.00
1350 - 1399	126.80	110.60	87.22%	49.30	39.40	44.60	35.60	133.30
1400 - 1450	158.60	140.70	88.71%	43.50	34.70	30.90	24.70	92.50

Relative Contributions of Arable Crops and Livestock to Estimated Gross Revenues of the Manorial Demesne Economics within the FTC counties of southern England: 1288 -1315 and 1375-1400

Period	No. of Manors	Percentage of Gross Revenues from:		Mean Gross Revenues
		Crops	Livestock	in £ sterling
1288 - 1315:				
Conventual and Collegiate Manors	111	54.70	45.30	13.23
Episcopal Manors	18	71.30	28.70	33.42
Lay Manors	31	71.10	28.90	29.99
Royal Manors	43	66.70	33.30	27.84
TOTAL	**203**	**64.40**	**35.60**	**20.70**
1375 - 1400:				
Conventual and Collegiate Manors	88	45.30	54.70	27.09
Episcopal Manors	13	51.60	48.40	42.24
Lay Manors	38	46.00	54.00	29.03
Royal Manors	2	65.20	34.80	14.72
TOTAL	**141**	**47.80**	**52.20**	**28.87**

FTC: Feeding the City (of London) Counties: Bedfordshire, Berkshire, Buckinghamshire, Essex, Hertfordshire, Kent, Middlesex, Northamptonshire, Oxfordshire, Surrey

Peasant Obstacles to increasing livestock production in 15th century

- (1) **livestock raising required:**
- **large capital investments**: in livestock herds/flocks, breeding stock, fencing, etc.
- **large amounts of land:**
- (2) **Most English peasants lacked ready access** to both capital and land
- (3) **Barriers of manorial and Open Field or Common Field agriculture:** made breeding impossible
- (4) **No northern counterparts to Mediterranean agricultural contracts for capital:** *mezzadria & census*

Early Tudor Enclosures: 1460 - 1520

- (1) **Definitions of enclosures**
- - **placing land under single management:** whether by owner-occupiers or tenants
- - → **thus total elimination of communal land rights and land use**
- -(2) **undertaken by either:**
- the manorial lord or by aggressive tenants:
- usually in gradual, piece-meal forms – rarely was a manor fully enclosed, at any one time
- - (3) **a shift from Grundherrschaft back to Gutsherrschaft?** Answer, next term

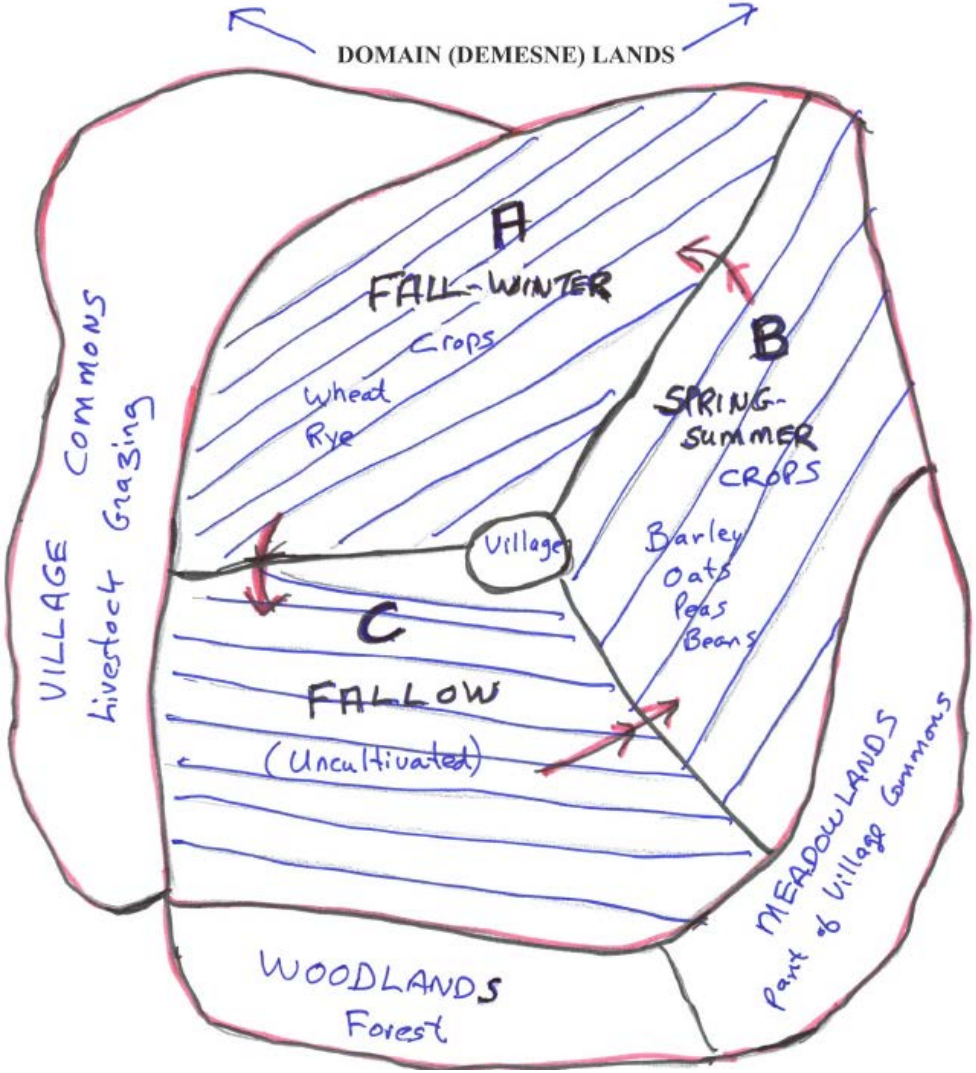
Early Tudor Enclosures: 1460 – 1520 (2)

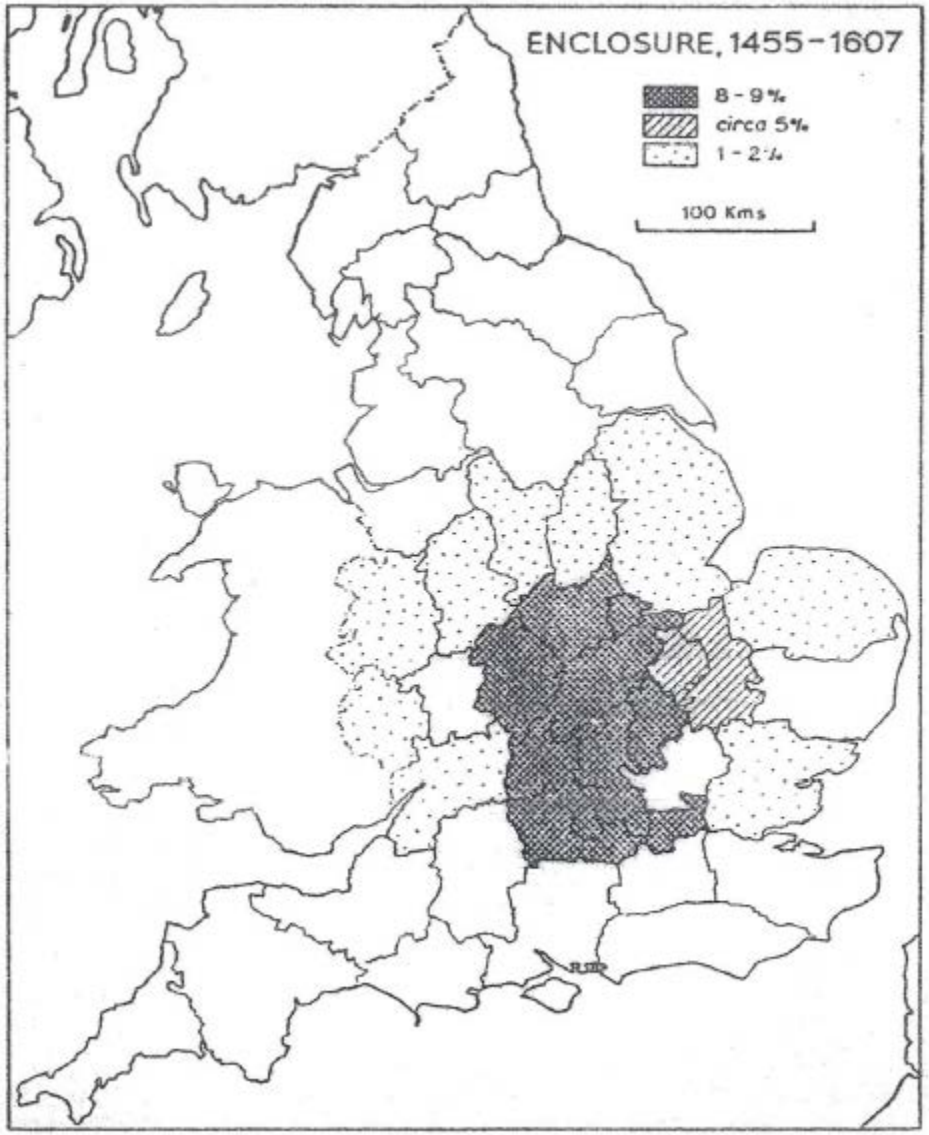
- (1) **Forms of Enclosures: for exclusive use of lord or a tenant**
- a) **enclosures of the village Commons**: fencing off pasture lands for use of landlord or his tenant ('keep off the grass')
- b) **engrossing of the arable open fields**: consolidations of scattered tenancies in form of interspersed plough strips
- c) **reclamation of marshes, fens, wastelands:** into either pasture or arable lands (socially beneficial form of enclosures)
- (2) **The first two forms of enclosures:**
- **usually meant the eviction of remaining peasant tenants: -**
- **chiefly in the Midlands** zone of England (see map)

OPEN OR COMMON FIELDS

WITH THREE-COURSE CROP ROTATIONS

("THREE FIELD" SYSTEM WITH FALLOW)




ENCLOSURE, 1455–1607
8 - 9%
circa 5%
1 - 2½
100 Kms

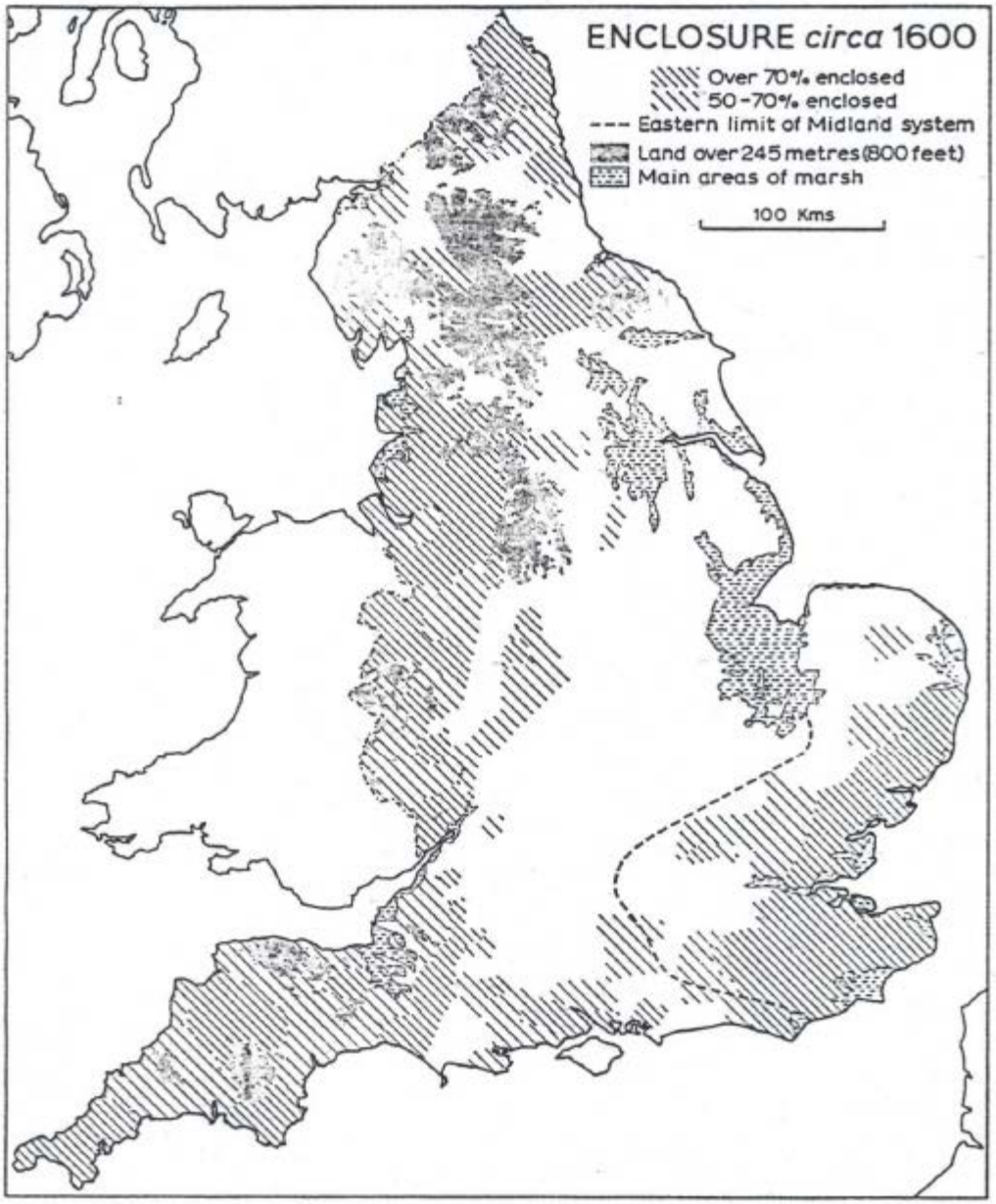


Fig. 54 Enclosure *circa* 1600

Tudor Enclosures: in and beyond the Midlands zone

- (1) **Most enclosures in late-medieval, early-modern England took place peacefully, OUTSIDE the Midlands**, as indicated on previous map: in areas that were:
- a) **already pastoral** (for sheep or cattle raising)
- b) **in zones of non-manorial independent peasant farming:** in severalty, not in communal farming
- c) **thinly settled**
- 2) **East Anglia and Home Counties:** see the map
- a) **became densely populated, but largely non feudal**, non-manorial, non-communal
- b) **voluntary enclosures:** with little peasant resistance

The Midlands: Socially Disruptive Enclosures

- (3) **Why were enclosures in the Midlands socially disruptive (esp. in the 16th century)? - peasant resistance**
- a) **Major region of 'Mixed Husbandry'**: equally suitable for **grain and sheep raising → conversion of arable to pasture**
- b) **Region with one of densest populations** in England
- c) **most highly feudalized and manorialized region**
- d) **thus region of classic Open Field communal farming**:
- **Brenner thesis**: that communal Open Field farming was a peasant-determined system to resist manorial exploitation:
- e) **thus peasant resistance to enclosures undertaken by manorial landlords or their chief tenants**

Demographic/Economic Models to Explain Enclosures - 1

- (1) **Demography: the role of continuing population decline**
- - **NOTE: most textbooks still try to explain enclosures as a reaction to population growth & diminishing returns**
- **-** see the **Boserup and Thirsk models**
- - **but this view is false: because population continued to decline** during the entire era of the early Tudor enclosures: from the 1460s to the 1520s:

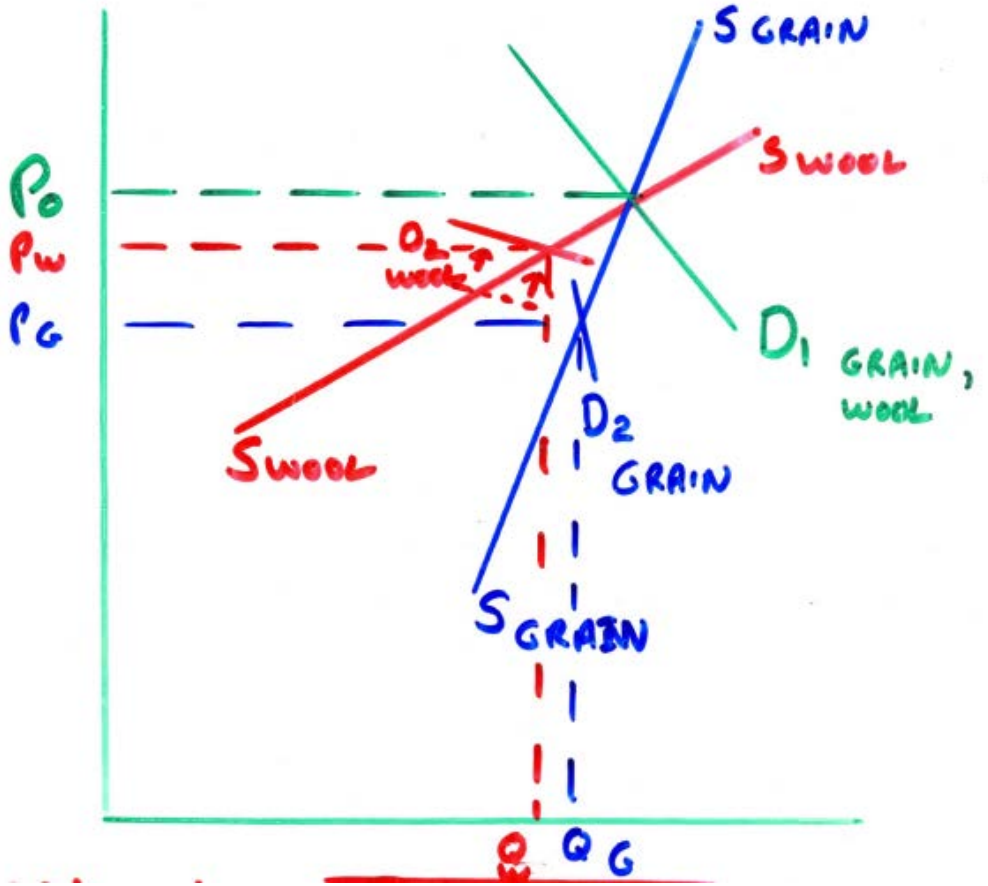
Demographic/Economic Models to Explain Enclosures - 2

- (2) **The Beresford-Blanchard Model of Enclosures**
- -a) **continuous population decline had meant too many vacated tenancies by the 1450s**: even if landlords preferred to maintain tenants on arable open fields,
- -b) **thus better choice to lease large blocks of vacated tenancy lands to tenants who would maintain flocks of sheep**
- than having the land lie unproductive, with no rents

Demographic/Economic Models to Explain Enclosures - 3

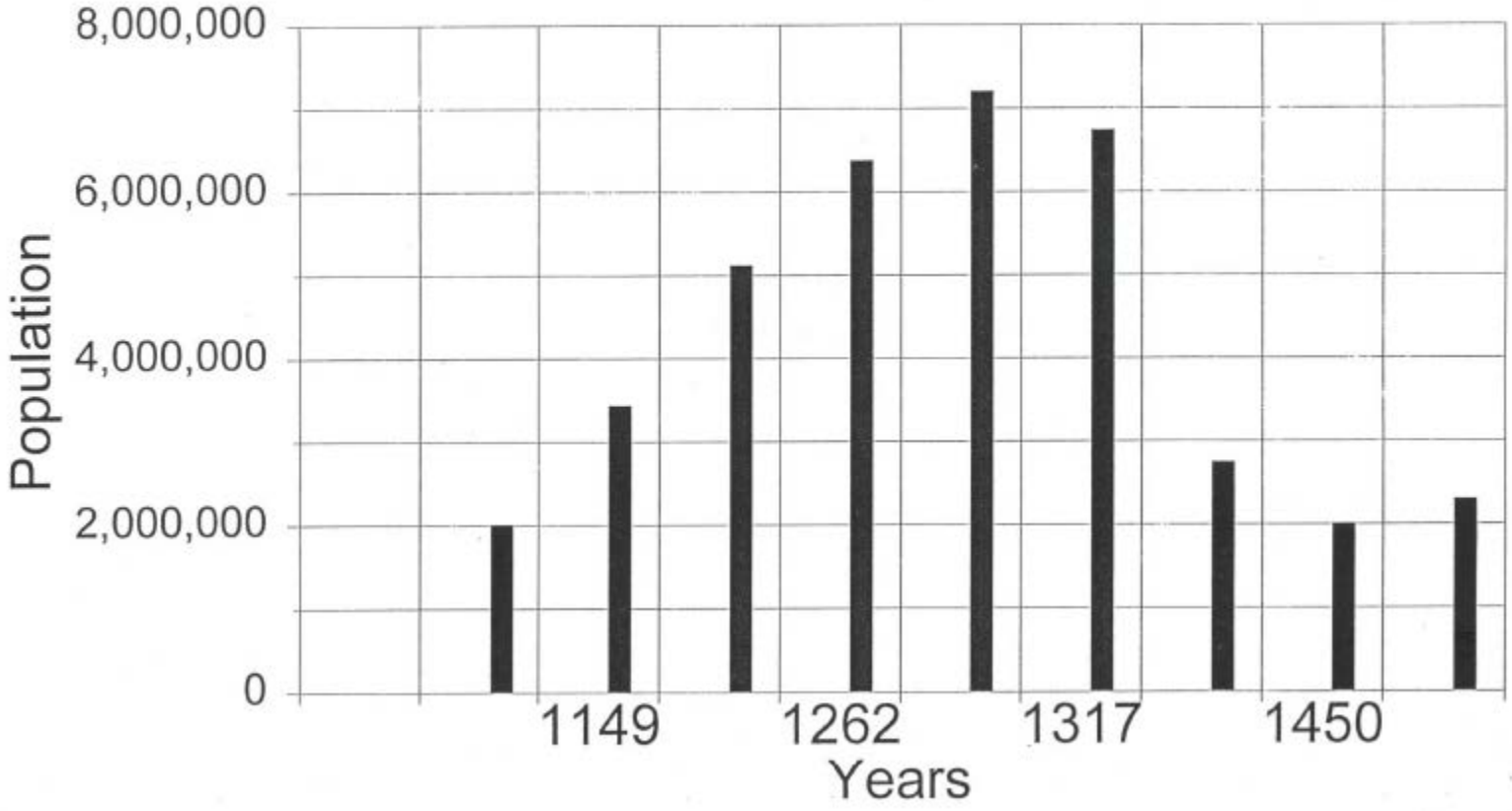
- (3) **Additional demographic arguments (not favoured by the B-B model)**
- a) **depopulation and alteration of land:labour ratio:**
- **had made labour too scarce and costly** for land-intensive arable farming - especially with declining productivity in arable agriculture
- b) **livestock farming is land extensive and requires little labour**: **land now abundant**, with evidence of rising labour productivity in pastoral farming
- c) **price-cost scissors: when the price-cost ratios were more adverse in arable** than in pastoral

Grain & Wool Prices with Depopulation



ENGLISH POPULATION ESTIMATES

1088 - 1523: in Millions



Why did Tudor Enclosures take place so late: if demography is crucial?

- (1) **If the economics of depopulation are the prime consideration,** why did Enclosures begin only a **full century after the Black Death?**
- (2) **Possibly because the depopulation** and total vacancy of tenancy lands did not become severe until the mid-15th century?
- (3) **Possibly because the relative shift in arable and livestock prices** did not become decisive until the 1460s → next topic (English cloth trade)

Why did Tudor Enclosures take place so late: if demography is crucial? (2)

- (4) **Why was the Tudor enclosure movement devoted almost entirely to sheep raising?**
- - and not to other forms of livestock farming?
- - **calamitous fall of the wool export trade** after the establishment of the Calais Staple (1363), especially from the 1390s → with very adverse consequences for both wool prices and sheep production
- - (5) **Expansion of English cloth export trade - remains chief agent of change from 1460s**

Rise of the English Cloth Export Trade: role of taxation

- (1) **Export taxes on Wool:** wool export taxes became increasingly heavier (as seen), especially from 1360s,
- (2) **Export taxes on woollen cloths:** remained light:
- - **on denizens:** only 14d per cloth (from 1347)
- - **on Hansard Germans:** even less: 12d per cloth (by the Carta Mercatoria of 1303)
- (3) **Result**: **cloth export taxes were only about 3% of export values**, vs. up to 50% on wools-
- accounting for 60-70% of Flemish production costs
- (4) **obvious English economic advantage:** convert tax-free wools at home into woollen cloths for export

Trends in English Cloth Export Trade, 1350s to 1460s: 1

- (1) **Initial expansion of English cloth exports: peaking in the 1390s**
- - as noted, that expansion failed to compensate for the stark decline of wool exports

  (2) **Problems**: **falling populations, depressions, piracy, warfare in European markets:**

  - **conflicts with the German Hanseatic League** in the Baltic region (to be seen in later lecture, on Trade)

  → **disrupted or curbed cloth sales**
- (3) **Result: Cloth exports fell:** from 1390s to 1420s:
- (4) **Brief recovery in 1420s, then a severe slump:** with a general **North-European depression**, from the 1440s to 1460s (to be explored later: in the Trade lectures)

Trends in English Cloth Export Trade, 1350s to 1460s: 2

- (5) **English cloth trade did NOT vanquish its rivals in the Low Countries until the 1460s**
- **but then chiefly because of even more adverse English fiscal policies** imposed on the wool export trade (also to be seen later)
- (6) **From 1460s: unparalleled boom in the English cloth trade**

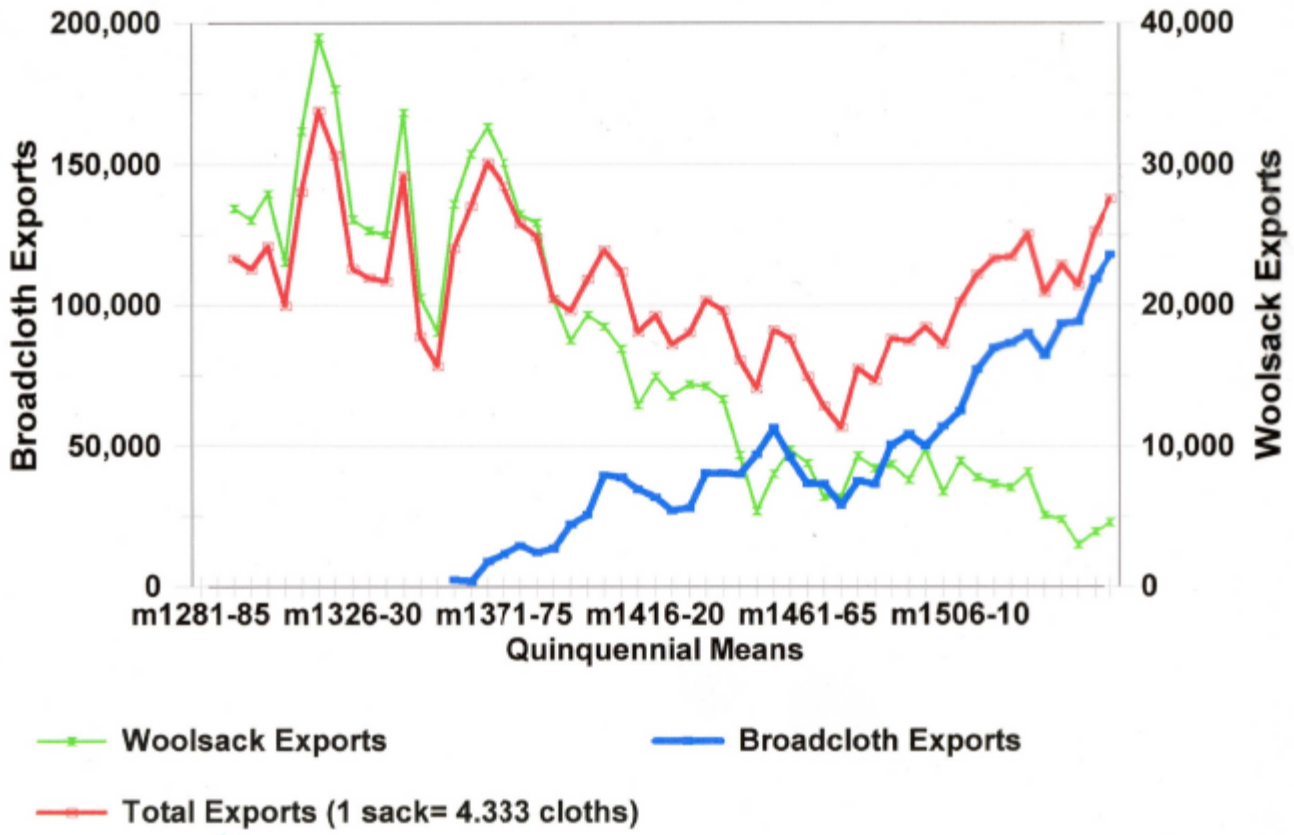
  - see the graphs below

English Cloth Trade Boom: 1460s to the 1540s

- (1) **English cloth-trade boom lasting 80 years:** from 1460s to the 1540s
- (2) **Coincides with the first Tudor Enclosures**, at least to the 1520s
- (3) **Reflected in changing grain:wool price ratios:**
- more favourable to wool from 1460s to the 1520s
- but from the 1520s, grain prices rose faster than wool prices, for the next century: discussed next term
- (4) **Note: attributing enclosures to cloth exports was a once fashionable thesis:** in early 20th century
- – **but it is no longer is**: except for me! Who to believe?

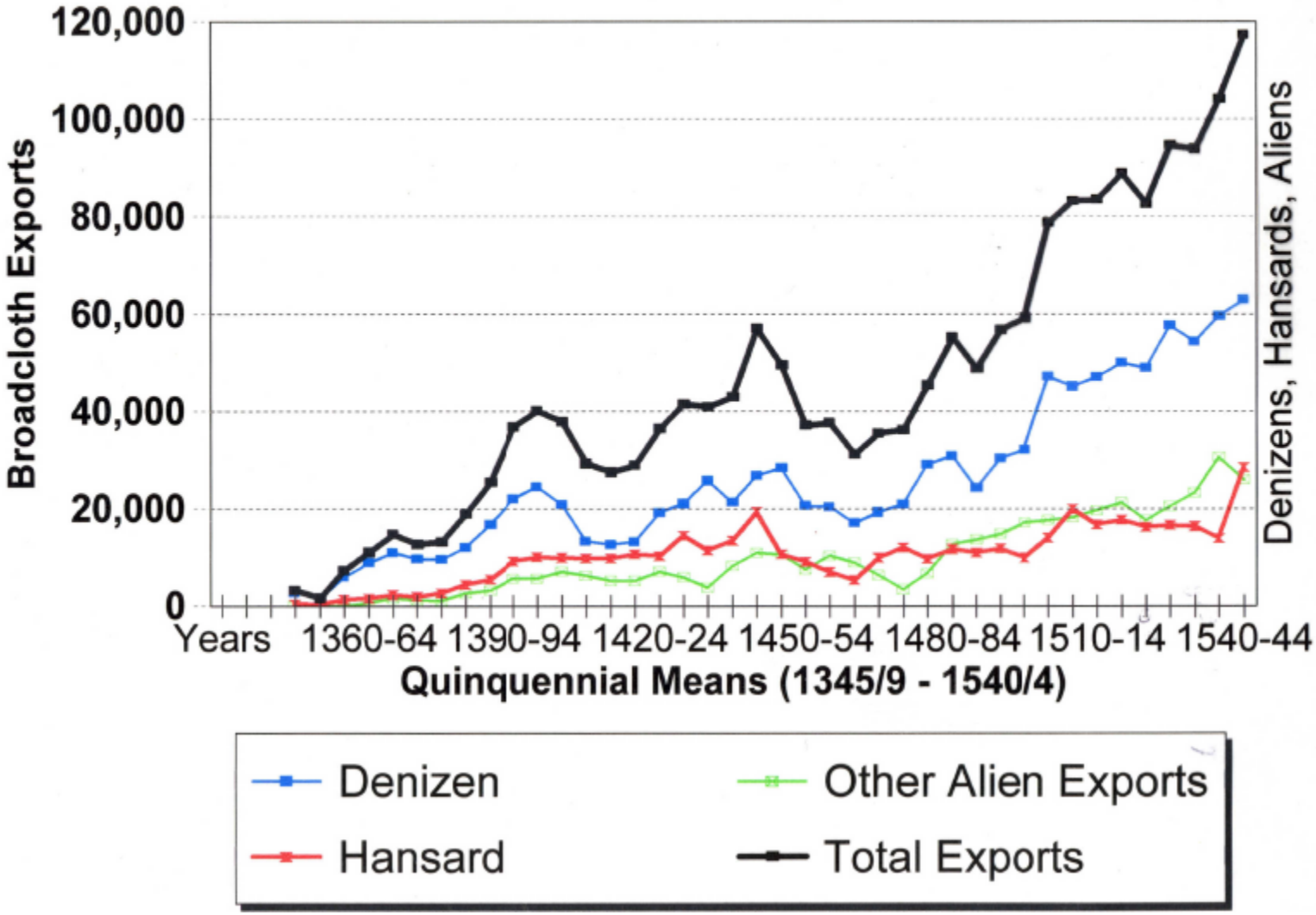
English Wool & Cloth Exports 1280-1545

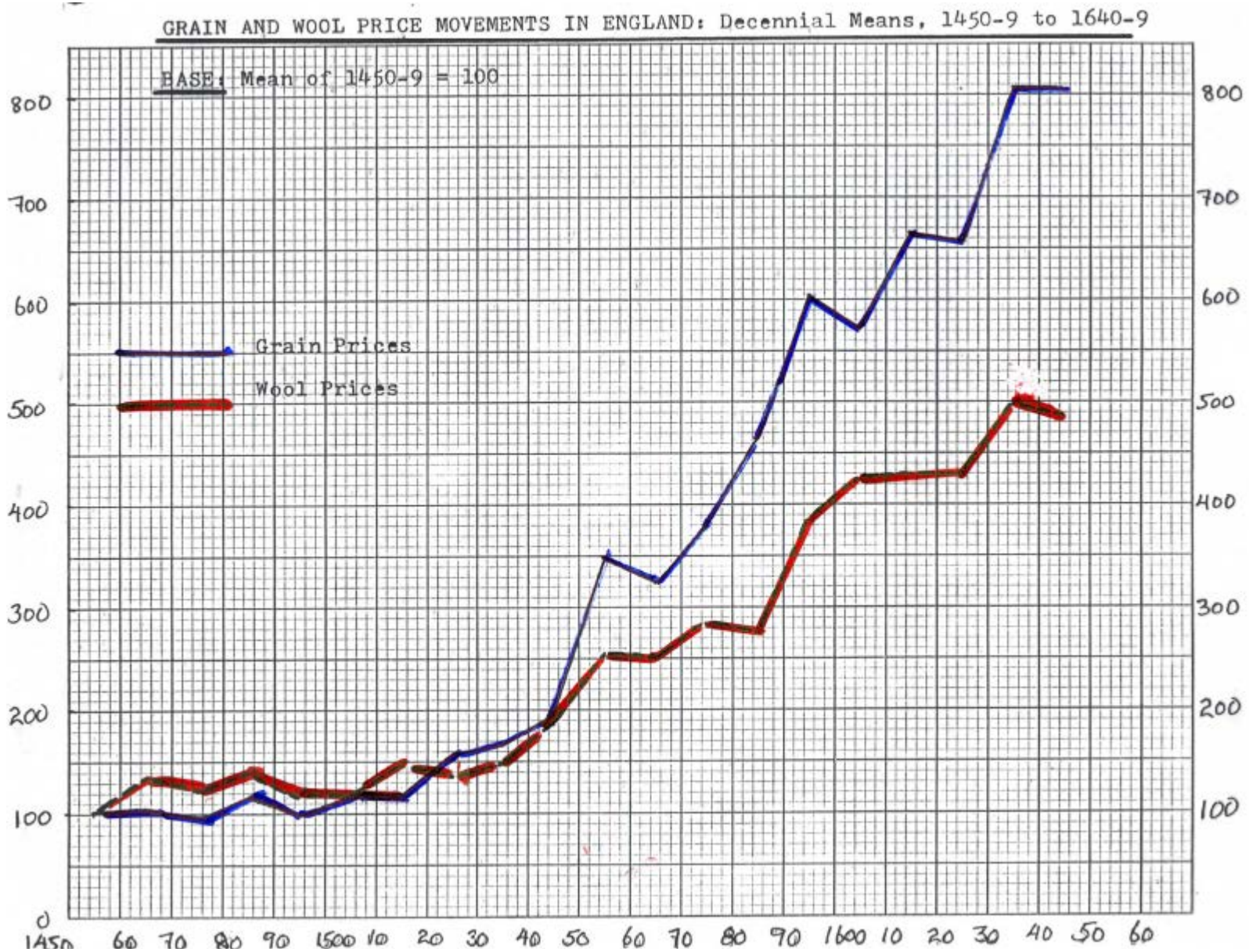
Woolsacks and Broadcloths 5 year means



ENGLISH CLOTH EXPORTS

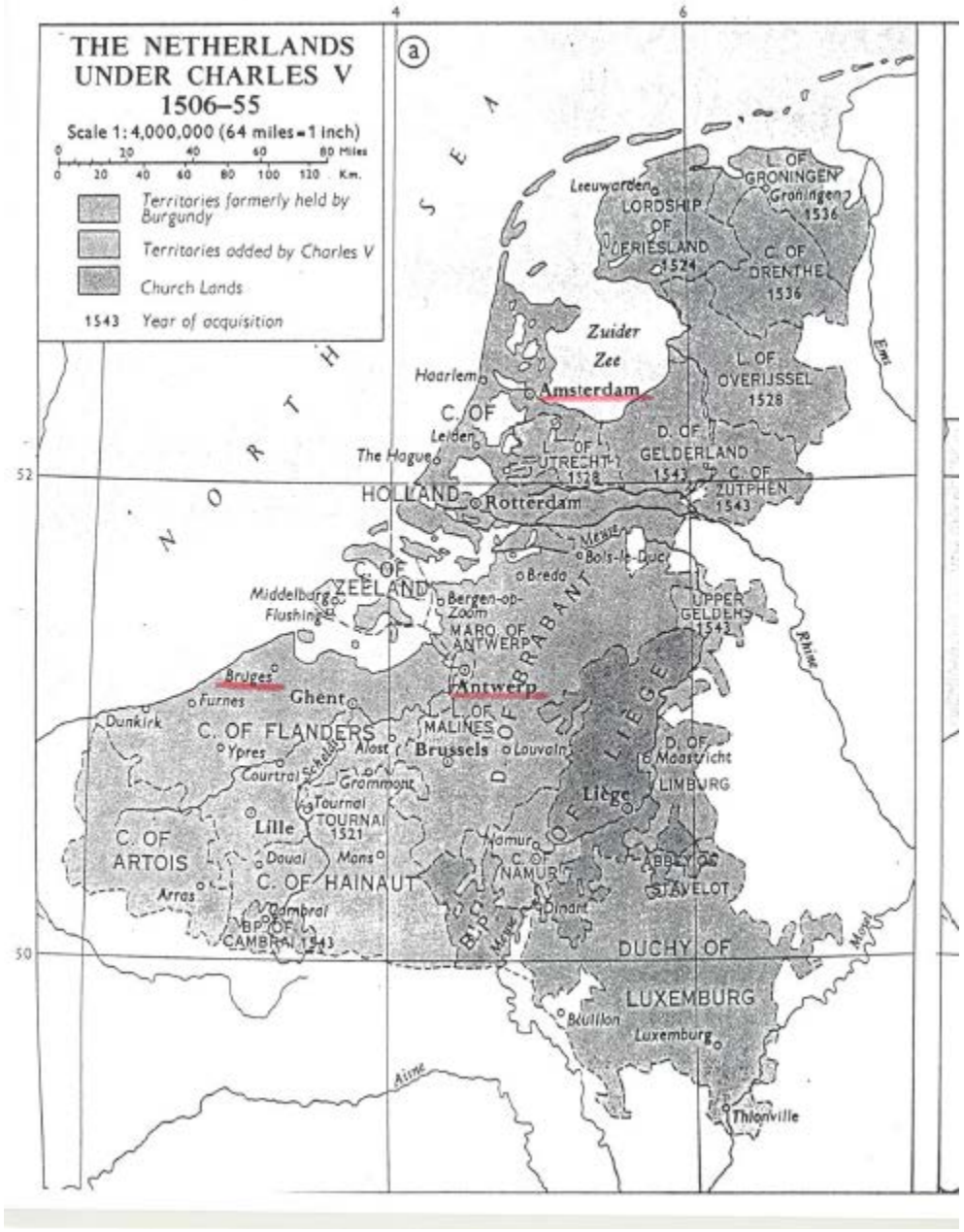
1345-49 to 1540-44: Five Yr Means




GRAIN AND WOOL PRICE MOVEMENTS IN ENGLAND: Decennial Means, 1450-9 to 1640-9
BASE: Mean of 1450-9 = 100
Grain Prices
Wool Prices
800
700
600
500
400
300
200
100
0
1450
60
70
80
90
1500
10
20
30
40
50
60
70
80
90
1600
10
20
30
40
50
60

The role of the Antwerp market

- (1) **English cloth trade boom of 1460 – 1540 coincides with the Golden Age of Antwerp:**
- or to 1560s, when it had become the commercial-financial capital and chief European market
- (2) **English cloth trade provided the first leg of the commercial tripod** on which Antwerp's supremacy rested: discussed in later Trade lecture
- **a tripod of English woollens, South German metals (silver + copper), and Portuguese spices**


THE NETHERLANDS UNDER CHARLES V 1506–55
Scale 1: 4,000,000 (64 miles = 1 inch)
0 20 40 60 80 Miles
0 20 40 60 80 100 120 Km.
Territories formerly held by Burgundy
Territories added by Charles V
Church Lands
1543 Year of acquisition
a
4
6
52
50
NORTH SEA
Leeuwarden
L. OF GRONINGEN
Groningen
1536
LORDSHIP OF FRIESLAND
1524
C. OF DRENTHE
1536
Zuider Zee
Ems
Haarlem
Amsterdam
L. OF OVERIJSSEL
1528
C. OF HOLLAND
Leiden
The Hague
L. OF UTRECHT
1528
D. OF GELDERLAND
1543
C. OF ZUTPHEN
1543
Rotterdam
Meuse
Bois-le-Duc
Breda
C. OF ZEELAND
Middelburg
Flushing
Bergen-op-Zoom
MARQ. OF ANTWERP
D. OF BRABANT
UPPER GELDERS
1543
Rhine
Bruges
Ghent
Antwerp
Furnes
Dunkirk
C. OF FLANDERS
L. OF MALINES
Ypres
Alost
Brussels
Louvain
D. OF LIÈGE
Maastricht
LIMBURG
Courtrai
Scheldt
Grammont
Tournai
TOURNAI
1521
Liège
Lille
C. OF ARTOIS
Douai
Mons
Namur
C. OF NAMUR
ABBEY OF STAVELOT
Arras
C. OF HAINAUT
Cambrai
Dinant
BP. OF CAMBRAI
1543
Meuse
Mosel
DUCHY OF LUXEMBURG
Bouillon
Luxemburg
Aisne
Thionville

Monetary Factors in English Cloth Export Boom to Antwerp Market

- (1) **South German silver-copper mining boom from the 1460s:**
- **South German merchant bankers** brought their silver, copper, and fustian textiles to Antwerp – along with banking enterprises
- **Chiefly to exchange these good for English woollens**: which were dyed & finished in and around Antwerp and in neighbouring Dutch towns

- (2) **English monetary policy: in 1464, Edward IV debased the English silver coinage by 20%** -- currency depreciation stimulated exports
- since the woollens were sold in depreciated pounds sterling

- (3) **Burgundian monetary policy: in 1466, in retaliation, Philip the Good, duke of Burgundy** (ruler of Low Countries)-
- debased both silver and gold: though by a lesser degree
- In doing so, he altered the bimetallic mint-ratios to favour silver strongly: to offer a higher price for silver in relation to gold and other goods

Economic & Social Importance of the early Tudor Enclosures (to 1520)

- (1) **Removal of feudal barriers:** of manorial Open or Common Field farming
- (2) **Conversion of communal property rights into exclusive private property rights**
- - **right of owner to work the land** without hindrances
- - **or to lease the land** to anyone of his choosing
- - **right to sell, trade, bequeath**, as well as lease land
- - **right to mortgage land**: to raise capital by pledging land as collateral in a loan: **not possible with communal rights in Open Field farming**
- (3) **Right and ability of landlord to capture the Ricardian rent**: **or to share it with a few tenants**, with periodic changes in the lease (fixed term)

Enclosures & Capital Investments

- (1) **Agricultural development required often large capital investments:**
- For late-medieval English agriculture: principally in livestock
- **especially with the 'New Husbandry'** (next term)
- (2) **Role of Enclosures in facilitating greater capital investments:**
- a) **mortgaging land:** with land as collateral
- b) **capturing Ricardian economic rents** on land
- c) **capital gains** from selling land, other private assets:

Did Tudor Enclosures promote increased productivity?

- (1) **Gains from single management: by owner or tenant**
- a) **to make all economic decisions**: without need for communal consent (concerned about risk-aversion).
- b) **freedom to allocate resources:** between arable and pasture; crop selections; reducing the fallow, etc.
- **allocation of inputs**: land, labour, capital – market oriented
- c) **hiring wage-labour to displace former tenants**: avoid problems of disguised unemployment
- d) **to engage in selective breeding of livestock:** not possible with communal grazing (intermingled flocks, herds)
- e) **better ability to achieve economies of scale**: through amalgamations (or divisions of large estates)

Did Tudor Enclosures promote increased productivity? - 2

- (2) **Enclosures, however, offered only reasonable possibilities:**
- - **did not guarantee that rational choice and profit maximization** be pursued
- - **this question must be left to the second term,** when we return to the later Tudor and the Stuart Enclosures, the 'New Husbandry', the 'Rise of the Gentry' debate

Ralph Davis: on agricultural innovations

- **No class of users of the land was less able to innovate [than the peasantry]**; and great numbers of them were subsistence farmers who grew [grain], not for the market except in years of unusually good harvest, but for their own families. Though peasants were by no means unwilling to innovate if the practical advantages were clear and the risks small, they had the least facilities for information, the least resources to bear the costs and risks of change, the least capacity to co-erce their slow-moving fellows into the cooperative effort that was usually necessary for large-scale changes.
- **It was not easy for landlords to compel the peasant community of a village to try new ways** so long as most tenures gave the peasants security at more or less fixed rentals, and the key to extensive rural change had to be found eventually in the breaking down of old tenures so that peasants could be subjected to economic pressures, or alternatively forced out in favour of market-oriented farmers.